

**A Quantitative and Qualitative Inquiry
into Dementia and Physically Aggressive
Behaviour in Residential Aged Care**

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for the Degree of
Doctor of Philosophy**

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Declaration of Originality

This thesis contains no material that has been accepted for a degree or diploma by the University of Tasmania or any other institution, except by way of background information and duly acknowledged in the thesis, and to the best of my knowledge and belief no material previously published or written by another person except where due acknowledgement is made in the text of the thesis, nor does the thesis contain any material that infringes copyright.



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Abstract

Australia has an ageing population with a proportionate increase in the number of people with dementia. Subsequently, there are an increasing number of people living in residential aged care with dementia. Indirect evidence suggests behavioural symptoms associated with dementia are of concern to nursing and care staff but there is little research that explores how and why this is the case. The behavioural symptoms of dementia are referred to as Behaviours of Concern (BoC) in this thesis.

This study examines the extent to which BoC are of concern to nursing and care staff in the Tasmanian residential aged care sector. A mixed methods approach comprising two distinct phases was undertaken.

The first phase was a general survey to determine the incidence and impact of BoC to provide a contextual perspective. The focus was on physically aggressive behaviour in Tasmanian Residential Aged Care Facilities (RACFs). This was important because of two identified gaps in the literature: a lack of clarity found in the reporting of incidence of physically aggressive behaviours; and an ambiguity surrounding the impact of physically aggressive behaviour on nursing and care staff.

The second phase focussed on the incidence, impact, understanding and management of physically aggressive behaviour in one RACF from multiple perspectives to determine how and why it was of concern to nursing and care staff. Data were collected using multiple methods including a survey, a clinical audit, structured observation, participant observation, group discussions and interviews with nursing and care staff.

The literature highlighted that physically aggressive behaviour among residents with dementia is a significant issue for nursing and care staff in RACFs. This study found a low incidence of physically aggressive behaviour among people with dementia, but that when it occurred it had a high impact on nursing and care staff. The high impact is attributed to a lack of capacity within the aged care sector to manage such behaviour effectively. This lack of capacity was due to a number of key factors. These included: the absence of a formal dementia diagnosis; a shortage of skilled nursing staff able to understand and assess individual residents' needs; a nursing and care staff shortage restricting the possibility of delivering one-to-one nursing care; a culture of tolerance to physically aggressive behaviours; a culture of resistance to the implementation of behaviour management strategies; problems with the educational preparation of staff; and ineffective communication between nursing and care staff regarding behaviour management.

Publications Arising from this Thesis

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Cubit, K.A.,¹ Farrell, G., 2006, Aggression in nursing: a time to look closely at aged care? *Contemporary Nurse*, Vol. 21, No. 2, pp. 264-265.

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Glossary of Initialisms and Acronyms

ABMI	Agitation Behaviour Mapping Instrument
ABS	Australian Bureau of Statistics
ACAT	Aged Care Assessment Team
ACFI	Aged Care Funding Instrument
AD	Alzheimer's Disease
ADC	AIDS Dementia Complex
AHMAC	Australian Health Minister's Advisory Council
AIDS	Acquired Immune Deficiency Syndrome
AIHW	Australian Institute of Health and Welfare
ANF	Australian Nursing Federation
APP	Amyloid precursor protein
ARD	Alcohol-related Dementia
BoC	Behaviours of Concern
BPSD	Behavioural and Psychological Symptoms of Dementia
CDR	Clinical Dementia Rating scale
CMAI	Cohen-Mansfield Agitation Inventory
DLB	Dementia with Lewy Bodies
DON	Director of Nursing
DSU	Dementia Specific Unit
DSM	Diagnostic and Statistical Manual of mental disorders
DT	Diversional Therapist
EN	Enrolled Nurse
GP	General Practitioner
FTD	Fronto-temporal Dementia
HIV	Human Immunodeficiency Virus
ICD	International statistical Classification of Diseases and related health problems
ICF	International Classification of Functioning, Disability & Health
MMSE	Mini-Mental State Examination
NCCH	National Centre for Classification in Health
NOK	Next of Kin
NUM	Nurse Unit Manager
OH&S	Occupational Health and Safety
PBS	Pharmaceutical Benefit Scheme
PCA	Personal Care Assistant
PLST	Progressively Lowered Stress Threshold
RACF	Residential Aged Care Facility
RCS	Resident Classification Scale
ReBOC	Reducing Behaviours of Concern
RN	Registered Nurse
WHO	World Health Organization

Chapter 1

Introduction

1.1 Introduction

This study is concerned with the physically aggressive behaviours exhibited by people with dementia, and the impact these behaviours have on nursing and care staff. This study recognises that there is a large and important body of dementia research. Well known and accepted areas of research encompass the pathology, aetiology and diagnosis of dementia and its behavioural symptoms, management of cognitive decline and the experience of spouse caregivers. However, the controversy now lies in the management of people with dementia who exhibit Behaviours of Concern (BoC), specifically physically aggressive behaviour in the residential aged care setting. Key players in the management of care in this setting are Registered Nurses, Enrolled Nurses and Personal Care Assistants, who each have a defined relationship and differentiated roles in the provision of care.

The BoC are well recognised with prevalence aligned to the type of dementia. However, there has been diffuse work on the incidence and impact of these behaviours on nursing and care staff working in the residential aged care sector. Specifically, there are identified gaps in the literature that focuses on physically aggressive behaviour. These include a lack of clarity found in the reporting of incidence of physically aggressive behaviours, and an ambiguity surrounding the impact of physically aggressive behaviour on nursing and care staff.

The incidence of physically aggressive behaviours in people with dementia has been reported in a number of studies. Incidence rates vary from fifteen per cent to more than 80 per cent across community and residential aged care populations (Ryden, Bossenmaier and McLachlan 1991; Lyketoso, Steele and Steinberg 1999; Lyketos, Steinberg, Tschanz, Norton, Steffens and Breitner 2000). The impact of physically aggressive behaviours is reported through secondary data that suggests that these behaviours are a problem to nursing and care staff. Studies have indirectly suggested that physically aggressive behaviour contributes to: increased absenteeism and sick leave; property damage; decreased productivity; increased security costs; litigation; increased workers compensation; reduced job satisfaction; and recruitment and retention issues (Hoel, Sparks and Cooper 2000). There is little research to date that directly examines how and why physically aggressive behaviours are of concern to nursing and care staff, their understanding of dementia and physically aggressive behaviours, or the strategies used to manage such behaviours. Further, little research looks specifically at how nursing and care staff implement behaviour management strategies in the unique context of the residential aged care sector.

1.2 Justification

This study focussed generally on physically aggressive behaviours exhibited by residents with dementia. The study was situated within the wider framework of aged care provision for people with dementia and within the demographic context of an increasing population of older people. In addition, the study is situated broadly in the political context of debate on issues related to the adequacy of health care provision for this older age group. At an anecdotal level, first-hand

personal experience as a nursing researcher indicated that residential aged care staff had considerable concerns as to the most appropriate management of residents with dementia who exhibited physically aggressive behaviour.

This is timely research because Australia has an ageing population with a proportionate increase in the number of people with dementia (AIHW 2007b) and this will most likely result in an increase in the incidence of physically aggressive behaviour in the residential aged care sector. The care of people with dementia, especially people who are physically aggressive, requires significant financial and human resources. Appropriate, timely and effective management of this care is crucial for maintaining and improving the long-suffering residential aged care sector and vital to the provision of cost effective and positive resident outcomes.

Researching the experience of residential aged care nurses and care staff is important because they are at the coalface of care provision in a sector that is fraught with problems, including severe recruitment and retention issues (Hogan 2004; Richardson and Martin 2004). These problems directly impact on the delivery of appropriate care to people with dementia (Cecchin and Jarrad 2002).

As a nursing researcher who has had a substantial and significant engagement in the residential aged sector,¹ the appropriate care and management

¹ As a nursing researcher, I was a Research Assistant on the *Making Connections in Aged Care* project, and the Project Manager for the Commonwealth funded *Building Connections in Aged Care* project Robinson, A., Cubit, K., Francis, B., Bull, R., Crack, J. and Webber, Y. (2002). *Making Connections in Aged Care: the report on the residential aged care preceptor project*. Tasmanian School of Nursing, University of Tasmania. Launceston. Retrieved from, Robinson, A., Cubit, K., Venter, L. and Fassett, M. (2004a). *Building Connections in Aged Care: Developing support structures for student nurses on placement in residential care - Stage one report*. Tasmanian School of Nursing, University of Tasmania. Launceston. Retrieved from, Robinson, A., Cubit, K., Venter, L., Fassett, M., Mather, C. and Andrews, S. (2004b). *Building Connections in Aged Care: Developing support structures for student nurses on placement in residential care - Stage two report*. Tasmanian School of Nursing & Midwifery, University of Tasmania. Launceston. Retrieved from, Robinson, A. and Cubit, K. (2005a). *Issues for student nurses caring for people with dementia in residential aged care*. Living with dementia-positive solutions: Alzheimer's Australia National Conference, Sydney, Australia, Robinson, A., Venter, L., Andrews, S., Cubit, K., Menzies, B., Jongeling, L., Fassett, M. and Mather, C. (2005). *Building Connections in Aged Care: Developing support structures for student nurses on placement in*

of people with dementia had been a topic of conversation with Registered Nurses on a number of occasions. These conversations often centred on their concerns about managing dementia and physically aggressive behaviour. Hence, it seemed to be pertinent to explore why this was the case.

Findings from this research will make an important contribution to aged care nursing knowledge on three levels, theory development, research and practice, each of which will be addressed in more detail below.

1.2.1 Theoretical Rationale

Budge (2005) argues the prevailing paradigm in dementia research is biomedical and directed toward cure, prevention or treatment of symptoms, or slowing the disease's progression. At the same time, social research has been largely focused on the patient's experience and that of their primary caregivers (mainly spouses or other family members). For example, there is a significant body of research exploring the social and psychological consequences of having a partner with dementia. Issues addressed include distress, burn-out, abuse, depression and support or respite needs (Morriss, Rovner and German 1996; Cohen, Swanick, O'Boyle and Coakley 1997; Lundh, Jonas and Nolan 2000; Robinson, Adkisson and Weinrich 2001). A number of authors have argued that despite this extensive body of research, there is a notable absence of study into the stressors placed on nursing and care staff working in residential aged care (Zimmerman, Williams, Reed, Boustani, Preisser, Heck and Sloane 2005), and how and why physically

Residential care - Final report. School of Nursing & Midwifery, University of Tasmania. Launceston. Retrieved from, Robinson, A. and Cubit, K. A. (2007). Caring for older people with dementia in residential care: nursing students' experiences. *Journal of Advanced Nursing* 59(3): 255-263.

aggressive behaviour exhibited by residents are of concern to nursing and care staff.

One of the ways to understand why the impact of physically aggressive behaviours is high is to get a sense of nurses and care staffs' understandings of dementia and aggressive behaviour. In providing an opportunity for nurses and care staff to participate in research, this project gave them an opportunity to share their experiences of providing care to people with dementia in a residential care environment. In this sense, a group who have been categorised as disempowered and marginalised (Bochel, Bochel, Somerville and Worley 2007) are given voice.

1.2.2 Nursing Practice Rationale

This thesis has the potential to contribute to nursing practice by providing new insight into the complexities involved in managing the physically aggressive behaviour of people with dementia, the impact of broader social understanding of dementia, and the workforce issues that determine who provides care for these people. As the research was conducted within the context of contemporary Australian aged care, it is characterised by a number of contextual issues that affect nurses and care staffs' capacity to care for people with dementia. These contextual issues are briefly discussed below.

It is well recognised that the number of people with dementia will increase over the next 40 years (AIHW 2007b). However, it is notable that there are no reliable data on the number of residents with dementia in residential aged care (AIHW 2004:40), though it is argued that dementia is a common diagnosis for admission (Souder and O'Sullivan 2003). Estimates suggest that up to half the residents of Residential Aged Care Facilities (RACFs) have dementia, the majority requiring high-level care (AIHW 2007b). Moreover, because of the

complex pathological disease process of dementia, usually accompanied by other coexisting pathologies, dementia contributes to increasing resident acuity. Resident acuity is reflected in the Resident Classification Scale (RCS) formed by the Australian Government Department of Health and Ageing (see Section 4.2). This funding tool provides a measure of resident dependency using a rating of one to eight. The proportion of permanent residents classified as high-care (RCS 1-4) has risen from 57.8 per cent in 1998 to 63 per cent in 2000 (AIHW 2002:82).

Following the aged care reforms introduced in 1997 by the Howard Liberal Government, ageing and aged care has become a national focus and more recently a hotly contested election issue in Australia. Although the ‘grey vote’ potentially has considerable influence on the political landscape, the issue of bed shortages in residential aged care has not altered; a point made explicit in the last major review of the sector (Hogan 2004). Bed shortages in the context of an ageing population mean that only the neediest get access. This has implications for nurses because it means the clients coming into aged care are increasingly frail, such that the number of residents requiring the highest category of care has nearly doubled in the last seven years (Andrews-Hall, Howe and Robinson 2007).

Recruitment and retention of nursing staff in the sector is hindered by a number of specific problems relating to: remuneration; heavy workloads due to increasing acuity and dependency of residents; the increased burden of paperwork related to accreditation requirements; the increasing number of unqualified workers; a lack of career prospects; and the poor image of nursing in aged care (Department of Education Science and Training 2002; Hogan 2004). As a result, the number of Registered Nurses employed in residential aged care is decreasing (AIHW 2003b). A direct consequence of the nursing shortage is an increase in the

number of unregulated non-professional carers employed in the sector. Personal Care Assistants now provide most of the basic care to residents such as washing, dressing, feeding and toileting (Hogan 2004). This in turn has contributed to the high regulatory influence in long-term care, thus creating a burden of paperwork and stress not experienced in other settings and resulting in an unsatisfied Registered Nurse workforce, causing aged care providers further difficulty in relation to recruitment and retention (Richardson and Martin 2004).

The changing workforce profile and resident profiles in RACFs has occurred concurrently with what is arguably the de-professionalisation of residential care, which has seen an increasing burden of care now being placed on unregulated workers employed in the sector (Richardson and Martin 2004). In short, there has been an increased need for the provision of complex care for residents residing in a context with decreasing capacity to provide that care. No literature was found that addressed this issue.

In a keynote address at the 2004 National Conference of the Aged and Community Care Services Australia, Christine Bryden made a plea to Mark Latham (the Opposition Party Leader at the time) to commit to making dementia a national health priority. After recommendations from a major report into the economic impact of dementia (Access Economics Pty Limited 2003), the then Federal Government named dementia a National Health Priority. In a Federal Budget initiative, the Coalition Government has since provided funding of \$320.6 million over five years for enhancing dementia research, primary care and early intervention opportunities.

1.2.3 Research Rationale

While there is a considerable body of recognised international literature on dementia and BoC, in Australia only two studies were located that explored workplace aggression directed toward nurses from residents/patients (Farrell, Bobrowski and Bobrowski 2006; Greal 2005). Moreover, there was a lack of clarity in the reporting of the incidence of physically aggressive behaviours in the residential aged care setting together with an ambiguity surrounding the impact of these behaviours on nursing and care staff.

Therefore, following an extensive review and synthesis of the literature in the areas of dementia, dementia care, BoC and residential aged care, the overall purpose of this study was to answer the following question: ‘To what extent are physically aggressive behaviour exhibited by residents with dementia of concern to nursing and care staff in the Tasmanian residential aged care sector?’

Based on this broader, overall research purpose and conceptual framework developed from the Literature Review, the following key questions were identified:

1. (a) What are staff perceptions of the frequency of BoC exhibited by residents with dementia in Tasmanian RACFs?
(b) How would nursing staff rank the BoC causing most disruption to the everyday running of facilities?
(c) How would nursing staff rank the BoC causing them most personal distress?
2. What is the incidence of physically aggressive behaviours among residents who have dementia living in a Tasmanian RACF?

3. What are the reporting practices of nurses and care staff in relation to physically aggressive behaviours?
4. How are physically aggressive behaviours by residents with dementia understood by Registered Nurses, Enrolled Nurses and Personal Care Assistants employed within a Tasmanian aged care facility?
5. How do these understandings affect the strategies utilised by staff to manage residents' physically aggressive behaviours?

Based upon the overall research purpose and specific research questions, the research involved a mixed methods study examining the factors influencing the provision of dementia care and the management of BoC with the intent of improving nursing care to people with dementia. A conceptual framework was built as a result of the analysis and synthesis of existing literature, and this framework was used to guide the research.

Mixed methods studies allow for the inclusion of both qualitative and quantitative data collection and/or data analysis in a single study (Greene, Caracelli and Graham 1989; Creswell 2003; Creswell and Plano Clark 2007). The use of mixed methods, as distinct from quantitative or qualitative approaches alone, is increasingly being used in social and behavioural sciences to study various social phenomena. This approach has been more widely recognised with the release of publications dealing specifically with mixed methodologies (for example see Creswell 2003; Tashakkori and Teddlie 2003; Creswell and Plano Clark 2007; Morse and Niehaus 2009). In this study, a mixed methodology was adopted to allow for an initial quantitative phase that sought to clarify the incidence of physically aggressive behaviour, and then to expand this knowledge

with the generation of rich data in relation to exploring the ambiguity surrounding the impact of physically aggressive behaviour on nursing and care staff.

The study was broken into two distinctly separate phases. Phase 1 involved the use of quantitative methods to determine nursing and care staffs' perception of the frequency and impact of BoC. Phase 2 examined in more detail the outcomes of Phase 1 using qualitative analysis. The nursing and care staff from fifteen Tasmanian RACFs participated in Phase 1. The outcomes are provided in Chapter 6. Phase 2 involved the use of primarily qualitative methods in one representative RACF identified from the results in Phase 1, Facility X. The results of Phase 2 are presented in Chapters 7 and 8. The second phase builds on the first, and the overall study provides further insights into the extent to which physically aggressive behaviours are of concern to nursing and care staff.

1.3 Thesis Structure

This thesis began by providing a background to the study into the impact of physically aggressive behaviours on nursing and care staff in the residential aged care context. The justification for the research, based on an extensive Literature Review in the areas of dementia, BoC and the residential aged care context, is presented in Chapters 2, 3 and 4.

In Chapter 2, the focus is on the multi-faceted and highly complex nature of the dementia syndrome. This chapter is important because it articulates the differences between the dementia illnesses that are useful in understanding behavioural manifestations. Moreover, this chapter highlights the knowledge base that should underpin dementia care.

Chapter 3 examines the behavioural changes commonly found in people with dementia, and the classifications of those behaviours with a focus on the ten behaviours identified by Alzheimer's Australia. This situates physically aggressive behaviour within the spectrum of BoC associated with the dementia syndrome. This is important in order to articulate the complexity of the behavioural symptoms and to highlight the range of strategies currently employed to address issues of BoC, in particular physically aggressive behaviour. A number of theories proposed to explain the behavioural changes are discussed along with pharmacological and non-pharmacological management strategies.

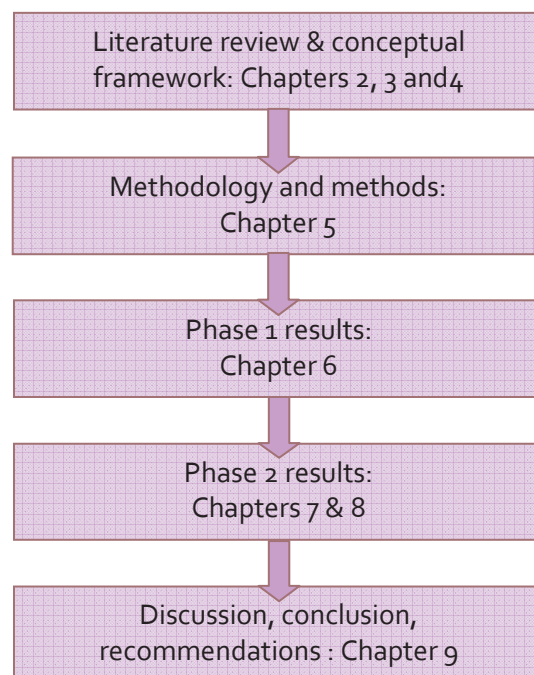
Finally, in Chapter 4, the contextual factors surrounding the provision of nursing care to people with dementia in the residential aged care sector are explored. This chapter examines the aged care context by looking at the social and political climate of residential aged care and the educational preparation of nursing and care staff. All of these factors contribute to how and to whom nursing care is provided to people with dementia. As part of this Literature Review, in Chapter 4, the conceptual framework is completed.

Based on the Literature Review and resulting framework, a methodology for the research project is presented in Chapter 5, providing a rationale for the chosen mixed methods approach, the method for participant selection, and the data collection and analysis techniques. Included in this chapter is an overview of the complicated process of obtaining informed consent for participation in research from people who have cognitive impairment. This last section of Chapter 5 has been expanded and published as a peer-reviewed journal article (Cubit, 2009).

The data collected is then presented and findings discussed in Chapters 6, 7 and 8. The data presented in Chapter 6 were published as a peer-reviewed journal article (Cubit, Farrell, Robinson and Myhill 2007).

This thesis concludes by outlining, in Chapter 9, the unique contribution to knowledge and practice provided by the research outcomes and highlights recommendations for further research and practice development. Figure 1.1 provides a diagrammatic representation of the structure of the thesis based on the conceptual framework and methodology chosen.

Figure 1.1: Thesis Structure



1.4 Chapter Summary

Chapter 1 of the thesis provided an overview of the research: the purpose, the unique contribution to knowledge that it represents; the research questions; and a

broad overview of the key literature that currently exists in relation to dementia, BoC and residential aged care. A brief overview of the methodology utilised for this research was also provided. The following three chapters provide an overview of the background literature, and the construction of a conceptual framework to guide the study.

Chapter 2

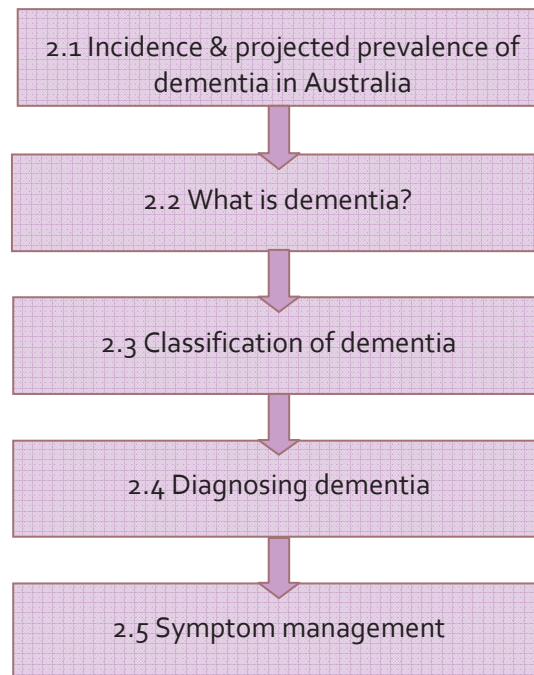
Dementia: Aetiology and Classification

The previous chapter introduced the research and provided an overview of the thesis structure. This chapter presents a review of the large and well known body of research that has examined the dementia syndrome.

This study is undertaken within the Australian residential aged care context. The prevalence of dementia within the aged care sector is high, with many residents seeking care in the later stages of the illness. This chapter will identify the main aspects of the different types of dementia and the associated behavioural symptoms of which physically aggressive behaviour is one, and highlight the complexity of the disease process. While Registered Nurses have this information to varying degrees, it is less likely to be had by Personal Care Assistants.

This chapter will include: a summary of the incidence and projected prevalence of dementia in Australia; a description of the dementia syndrome; a brief description of the most common dementias; a summary of the procedures used to diagnose dementia highlighting the issues surrounding under-diagnosis; and a brief examination of prevention and treatment approaches, which include symptom management. It is reasonable to assume that Registered Nurses and Enrolled Nurses the information presented in this Chapter, albeit in varying degrees, dependent upon when and where they received their education and training. The Personal Care Assistants working in aged care are less likely to have the same dementia knowledge base. The chapter structure is outlined in Figure 2.1

Figure 2.1: Chapter 2 Structure



This chapter will provide a basis from which the conceptual framework for this study was developed. A conceptual framework is defined by Miles and Huberman (1994:18) as a visual or written product that ‘explains the main things to be studied – the key factors, concepts or variables – and the presumed relationships between them’. The purpose of this Literature Review (and that in Chapters 3 and 4) is to identify and examine the relationships among several factors that have been identified as important to this research (Sekaran 2000). In doing this, a graphical representation of the conceptual framework will be developed.

2.1 Incidence and Projected Prevalence of Dementia in Australia

The reality that Australia is an ageing society is well documented. Predictions suggest that by 2051, six per cent of the total population will be aged over 85 years, representing approximately 1.8 million Australians, compared to 300,000 or 1.5 per cent in 2004 (ABS 2005b). The ageing of the Australian population is the result of increased longevity due to low infant and maternal mortality rates and a decreasing mortality from a range of diseases, particularly cardiovascular disease. An Australian boy born in 2004 had an average life expectancy of 78.1 years, and on average a girl would be expected to live to 83 years (ABS 2005b). Oeppen and Vaupel (2002) project that by 2060 life expectancy in Australia will have risen to 100 years. The increasing life expectancy is termed the ‘ageing of the aged’ and, as dementia is a condition mainly associated with older people, then the ‘ageing of the aged’ will be associated with increasing numbers of people with dementia.

In 2006, the number of Australians with dementia was 190,000. Sixty four per cent of those were female and 81 per cent were aged 75 or older (AIHW 2007b:52). Assuming current dementia age-specific prevalence rates, it is estimated that by mid-century, over 580,000 Australians will have dementia, equal to 2.3 per cent of the population (Access Economics Pty Limited 2005).

Reports now suggest that dementia is the greatest single contributor to the burden of disease due to disability at older ages, as well as the greatest single contributor to the cost of care in residential aged care (AIHW 2006b) estimated at \$1.8 billion in 2000-01 (AIHW 2004).

Overall, the characteristics of the population with dementia are: over 75 years of age; slightly more females than males; and from a lower socio-economic background than people without dementia (Access Economics Pty Limited 2003:41).

2.2 What is Dementia?

It is reasonable to assume that nursing and care staff providing care to people with dementia would have an understanding of the dementia syndrome. Dementia is a descriptive term used to describe the symptoms of a large group of illnesses, usually found in older people. In Latin, the word *demens* means ‘without mind’. The dementias are insidious conditions, largely unpredictable in their progression and characterised by cognitive impairment (Alzheimer's Australia 2004). Although dementia is more common in older people, it is not considered a part of normal ageing (AIHW 2006b:xii).

The International Statistical Classification of Diseases and related health problems (ICD) defines dementia as:

A syndrome due to disease of the brain, usually of a chronic or progressive nature, in which there is disturbance of multiple higher cortical functions, including memory, thinking, orientation, comprehension, calculation, learning capacity, language, and judgement. Consciousness is not clouded. The impairments of cognitive function are commonly accompanied, and occasionally preceded, by deterioration in emotional control, social behaviour, or motivation. This syndrome occurs in Alzheimer's disease, in cerebrovascular disease, and in other conditions primarily or secondarily affecting the brain (WHO 1992; NCCH 2002).

This will be the definition used in this thesis.

2.2.1 Aetiology of Dementia

Dementia can be caused by any one of more than 100 diseases, illnesses and conditions (WHO 1992; NCCH 2002). The cause is usually related to accumulation of proteins in the brain that impedes normal brain cell function, or to vascular damage to the brain, for example from stroke. Acquired brain injury, HIV-AIDS, alcohol, Multiple Sclerosis and Down syndrome can also cause dementia.

The irreversible and untreatable pathological changes in the brain are evident on examination using computerised tomography (CT) and magnetic resonance imaging (MRI), and functional brain scans such as positron emission tomography (PET). Changes commonly include atrophy (shrinkage) of the frontal, parietal and temporal lobes, widening of the sulci, and narrowing of the gyri. Neurofibrillary tangles and plaques may be found on microscopic examination of the brain and cerebral infarcts and emboli are found on investigation of vascular dementia.

Pathology can develop in one or more areas of the brain as the dementia progresses, which may cause symptoms to develop and change over time (Mocellin, Scholes and Velakoulis 2008) (see Section 8.1 in which a Registered Nurse describes a resident's 'morphing' behaviours). Such changes suggest that a set management strategy for symptom management will not necessarily be effective over time, and will need to be adapted according to the changing circumstances of the person.

2.2.2 Symptoms of Dementia

The symptoms of dementia may be divided into three symptomatic domains. These include neuropsychological impairments, psychiatric symptoms and behavioural disturbances, and the inability to perform activities of daily living. Depending on the nature and stage of the dementia, these symptoms may include any or all of the following: memory loss; language difficulties; failure to recognise people, places and objects; disorientation; mood changes; inability to perform all the tasks of daily living; pacing; hallucinations; delusions; depression; anxiety; aggression; inappropriate shouting; and incontinence (Boller, Verny, Hugonot-Diener and Saxton 2002; Bottrill and Mort 2003; AIHW 2004). There are a number of terms used to describe the behavioural and psychological symptoms, however, this thesis will use the term BoC (see Chapter 3).

It is the behavioural disorders associated with dementia that are the primary focus of this thesis, specifically physically aggressive behaviour. The Alzheimer's Australia definition of physically aggressive behaviour used in this thesis states that with respect to people with dementia, physically aggressive behaviour is defined as behaviour that includes hitting, hurting oneself or others, or throwing things (National Dementia Behaviour Advisory Service 2003). This definition of physically aggressive behaviour is consistent with accepted understandings of the term aggression. For example, the *Oxford English Dictionary* describes aggression as an unprovoked attack or assault.

Agitation is often recognised as a precursor to aggression. Agitation may be defined as excessive motor or verbal behaviours that may lead to potentially dangerous behaviours (UNC Hospitals 2008). Agitation is operationally defined by Cohen-Mansfield and Billig (1986) as inappropriate verbal, vocal or motor

activity that is not judged by an outside observer to result directly from the needs or confusion of the agitated individual. Agitation is not a diagnosis, but rather a term used by clinicians for a group of symptoms that may reflect an underlying disorder. Agitated behaviour is always socially inappropriate and according to Cohen-Mansfield and colleagues (1989) may be manifested in three ways including:

- abusive or aggressive toward oneself or others;
- appropriate behaviour performed with inappropriate frequency, such as constantly asking questions; or
- inappropriate according to social standards for the specific situation, as in taking off clothes in the activity room.

Agitation is an important concept in terms of this thesis because, as stated above, it provides an indicator of potential aggression and thus represents a key marker for implementing management strategies.

2.3 Classification of Dementia

Although cognitive decline is a common feature of dementia, there are a range of dementias each characterised by a different aetiology and pathology. Consequently, each of the dementias is associated with diverse cognitive and behavioural symptoms requiring specific treatment and management options.

Below follows a brief overview of some of the more prevalent types of dementia. In terms of this thesis, a discussion of aetiology and pathology specific to each of the dementias is important because it further demonstrates the complexity of the dementia syndrome. Moreover, the disease progression together with the manifestation of cognitive and behavioural symptoms is directly related

to the type of the dementia. Understanding this is important if service providers are to have an informed position with respect to the potential care requirements of the person with dementia.

Alzheimer's disease, vascular dementia, dementia with Lewy bodies, and combinations of these (mixed dementias) account for the majority (80-90 per cent of cases) of dementia (Alzheimer's Association Australia 2001). Fronto-temporal dementias (for example, Pick's Disease) usually occur in a slightly younger age group and accounts for approximately ten per cent of all dementia cases (Neary, Snowden, Gustafson, Passant, Stuss, Black, Freedman, Kertesz, Robert, Albert, Boone, Miller, Cummings and Benson 1998; Neary, Snowden and Mann 2005). The most common types of dementia will be discussed in terms of incidence, aetiology, pathology and symptomatology.

2.3.1 Alzheimer's Disease

Alzheimer's disease is the most common cause of dementia. Approximately 60 per cent of people with dementia have Alzheimer's disease (AD) (Ballard 2000). Although Alzheimer's is a Mendelian dominant trait,² two to three times more common in women than in men (Cummings and Bensen 1983:37), several other risk factors have been identified including education, intelligence, lifestyle and environmental factors (Alzheimer's Association Australia 2001). Cardiovascular risk factors including myocardial ischemia, hypertension, hyperlipidemia and

² Mendelian inheritance explains the way in which genes are passed from parents to children. A genetic trait such as hair colour is said to be dominant or recessive. A genetic trait is considered a dominant trait if it is expressed in a person who has only one copy of that gene, i.e. is phenotypically expressed in heterozygotes. A recessive trait is only expressed when two copies of the gene are present, i.e. is phenotypically expressed only in homozygotes. Therefore, a dominant trait is more likely to cause disease because only one gene needs to be damaged for the disease to occur. Huntington's disease is a Mendelian Dominant trait. Cree, L. and Rischmiller, S. (2001). *Science in nursing*. 4th ed. Marrickville, NSW, Elsevier.

smoking are associated with an increased risk of Alzheimer's (Prince, Cullen and Mann 1994; Meyer, Rauch, Rauch, Haque and Crawford 2000; de la Torre 2002).

Although the most defining feature of Alzheimer's disease is short-term memory loss, clinical diagnosis is based on the presence of a number of cumulative cognitive changes, which include alteration in memory and visuo-spatial functions, disorientation, alterations in language and communication.

Apart from cognitive changes, people with Alzheimer's disease also show a marked change in response to heat and cold (Bathgate, Snowden, Varma, Blackshaw and Neary 2001). People with Alzheimer's also experience urinary and faecal incontinence, exhibit primitive reflexes including grasp and suck responses, and eventually die from aspiration pneumonia or urinary tract infection (Cummings and Bensen 1983:44). Definitive diagnosis can only be confirmed on post-mortem examination with the finding of characteristic protein Beta-amyloid plaques and neurofibrillary tangles in the brain.

2.3.2 Vascular Dementia

Vascular dementia (or multi-infarct dementia) is usually perceived as the second most frequent type of dementia, after Alzheimer's disease, accounting for ten to 20 per cent of cases (Black, LoGiudice, Ames, Barber and Smith 2001; Stevens, Livingstone, Manela, Walker and Katona 2002; Knopman, Parisi, Boeve, Cha, Apaydin, Salviati, Edland and Rocca 2003).

Vascular dementia is characterised by a progressive decline, which is usually abrupt in a stepwise manner following vascular damage, ischemic cerebral injury or strokes. These events disrupt the blood supply to the brain causing brain cell death (Mocellin, Scholes et al. 2008). In the case of small vessel damage, the disease can be insidious and progressive (Pantoni, Garcia and Brown 1996;

Erkinjuntti 2000). Familial history of stroke, transient ischemic attacks, hypertension, or diabetes mellitus are also common in people with vascular dementia (Antai-Otong 2003). Almost half of those with diagnosed vascular dementia also have signs of Alzheimer's disease on autopsy, a condition usually referred to as mixed dementia (Esiri, Wilcock and Morris 1997).

Symptoms of vascular dementia can include memory and language dysfunction, as in Alzheimer's disease. Further, because vascular dementia affects the subcortical white matter in the brain, which has strong connections to the frontal lobes, behavioural changes similar to those with fronto-temporal dementia may be observed (Bathgate, Snowden et al. 2001). Symptoms usually include depression, apathy, mood changes, abnormality in eating patterns and sensory defects, for example visual deficits, poor planning and judgement (Black, LoGiudice et al. 2001).

2.3.3 Dementia with Lewy Bodies

Some confusion is found in the literature, as Dementia with Lewy bodies (DLB) has also been ranked as the second most common form of dementia (McKeith, Glasko, Kosaka, Perry, Dickson, Hansen, Salmon, Lowe, Mirra, Byrne and Lennox 1996) accounting for ten to fifteen per cent of all cases, mostly occurring in men (Mocellin, Scholes et al. 2008). Lewy bodies are small intracellular inclusion bodies in the nerve cells of the brain, found mainly in the cerebral cortex and substantia nigra. These Lewy bodies are identical to those found in Parkinson's disease and it is thought that these may contribute to the death of the brain cells (Alzheimer's Australia 2004).

A distinguishing feature of DLB is the fluctuating memory state. Clinical features also include rapid onset of symptoms, frequent falling, recurrent visual

and auditory hallucinations, paranoid delusions, and Parkinsonism (Luis, Barker, Gajaraj, Harwood, Petersen, Kashuba, Waters, Jimisin, Pearl, Petito, Dickson and Dura 1999; Antai-Otong 2003). Using medications to control Parkinsonian symptoms is difficult due to increased sensitivity to adverse effects of antipsychotics. Anti-Parkinson's medications cause increased confusion and antipsychotics worsen the symptoms of Parkinson's disease (Antai-Otong 2003:429).

Accurate diagnosis of DLB is important since the illness is responsive to management with cholinesterase inhibitors. Prescribing older antipsychotic medications such as haloperidol (Haldol) or chlorpromazine (Thorazine) is contraindicated in people with DLB as these medicines are associated with increased mortality due to sedation, falls and neuroleptic malignant syndrome (Mocellin, Scholes et al. 2008).

2.3.4 Frontotemporal Dementia

Frontotemporal dementia (FTD) refers to a behavioural syndrome associated with degeneration and atrophy of the frontal and temporal lobes (Neary, Snowden et al. 2005; Stewart 2006). FTD is an umbrella term for a number of diseases including Pick's disease (see below). People with FTD are often younger than those with Alzheimer's disease (commonly between 45 and 65 years of age), and have no specific risk factors (Stewart 2006). The onset is insidious and progressive, and survival is about eight years (Neary, Snowden et al. 2005). Memory is often intact until late in the illness. There is no known treatment.

The most defining feature of FTD is early changes in personality and behaviour. These changes include profound alterations in personality, social conduct and behavioural alterations including in social, interpersonal conduct,

emotional blunting, loss of insight, decline in hygiene and grooming, mental rigidity and inflexibility, distractibility and impersistence, hyper-orality, echolalia (repetitive noises), and perseverative and stereotyped behaviour (Yeaworth and Burke 2000; Bathgate, Snowden et al. 2001). People with damage to the orbitofrontal system characteristically exhibit the most problematic behaviours, often perceived as volitional or 'bad' by carers (for example, exhibiting aggressive, sexual disinhibition or shoplifting) (Stewart 2006). Significantly higher rates of assault and other anti-social behaviours are reported in FTD compared with Alzheimer's disease (Miller, Darby, Benson, Cummings and Miller 1997). The loss of pain response is significantly increased in FTD, as is the loss of the sense of smell. Repetitive behaviours are more common, such as are hoarding, wandering and pacing (Bathgate, Snowden et al. 2001).

2.3.5 Pick's Disease

Pick's disease is a rare, progressive, irreversible, degenerative disease of the nervous system, occurring mostly in middle-aged women and is characterised by signs of severe frontal and temporal lobe dysfunction (Yeaworth and Burke 2000; Antai-Otong 2003:409). Although the symptomatology is very similar to Alzheimer's disease (Antai-Otong 2003), the plaques and tangles typically found in Alzheimer's are not found in Pick's disease. However, Pick's bodies (round, microscopic abnormalities) are found in the affected brain cells, usually in the frontal and anterior temporal lobes and may thus classify as a FTD (Yeaworth and Burke 2000:250). Behavioural changes are dependent on the location of the damaged brain cells, but generally include alterations in personality and emotions.

2.3.6 Alcohol-related Dementia

Alcohol-related dementia is the result of long-term over use of alcohol. Cell death is attributed to excessive alcohol, vascular and liver disease, and B1 (thiamine) deficiency. Alcohol-related dementia is characterised by an inability to learn new material. Behavioural symptoms include apathy, anxiety and depression. Neurological symptoms include a wide gait and peripheral nerve damage (Mocellin, Scholes et al. 2008).

This overview shows that the general term ‘dementia’ includes a broad range of conditions all with their own aetiology, pathology, prognosis, treatments, and symptom management. Recognised progressive changes in behaviours are well documented and are summarised in Table 2.1, which shows the complexity of the dementia syndrome in terms of pathology and behavioural symptoms. For example, people with Alzheimer’s disease show alteration in memory, visuo-spatial functions and language, and are likely to mislay objects. Profound alterations in personality, irritability and aggression are present in a relatively high proportion of those with FTD, while people with DLB may present with Parkinsonian features, and psychotic symptoms such as paranoid delusions and hallucinations (Bathgate, Snowden et al. 2001). The recognition of the different behavioural changes associated with dementia has implications for social interaction in the community and for admission to RACFs (see Chapter 3). The complexity of the dementia syndrome should be reflected in the educational and training requirements of nursing and care staff working in the aged care sector.

Table 2.1: Distinguishing Features of the Main Types of Dementia

Adapted from: Mocellin, R., Scholes, A. & Velakoulis, D. (2008) *Quality dementia care: Understanding younger onset dementia*, Alzheimer's Australia, Hawker, ACT.

Dementia	Protein/Pathology	Brain regions	Early symptoms	Behavioural changes
Alzheimer's disease	Amyloid	Hippocampus Temporal lobes Parietal lobes	Memory loss	<ul style="list-style-type: none"> •Short-term memory loss •Gradual, steady decline •Embarrassment, depression, apathy, social withdrawal, reduced appetite, poor sleep and reduced spontaneous speech. •Memory problems can lead to suspicion and paranoia (e.g. may think a misplaced item is stolen).
Vascular dementia	None, damage is due to blood vessel blockage or bleed	White matter Grey matter	Determined by location of stroke	<ul style="list-style-type: none"> •Abrupt, stepwise decline •Personality and behaviour changes may be caused by awareness of other cognitive and functional deficits. leading to aggression •Insight, personality and sociality often maintained except with frontal cortical lesions. •Depression, loss of interest, apathy, withdrawal and poor sleep.
Dementia with lewy bodies	Synuclein	Basal ganglia Hippocampus	Slowing of movement and memory loss	<ul style="list-style-type: none"> •Hallucinations, anxiety and agitation may occur. •Inappropriate behaviour, irritability and frustration. •Apathy and/or depressive features.
Fronto temporal dementias (including Pick's disease)	Tau	Frontal lobes Temporal lobes	Personality, behaviour, judgement and psychiatric changes	<ul style="list-style-type: none"> •Lack of self-control, risk-taking, aggression, hypersexuality, frustration and irritability. •Personality changes and uncharacteristic behaviour. •Withdrawal or apathy. •Reduced activity and spontaneous speech. •Expression of inappropriate emotions. •May become uncaring or overly affectionate towards their caregiver (and family).

2.4 Diagnosing Dementia

Although there is no cure for dementia, Alzheimer's Australia argue that obtaining a diagnosis is critical (Alzheimer's Association Australia 1999). An accurate diagnosis facilitates the capacity to better predict the course of the disease, to determine the need for risk assessment, symptom management and genetic counselling, and to provide correct information for the patients and carers (Anand and Seymour 2006:57,61). However, as some of the cognitive and behavioural changes in dementia are similar to normal ageing, and to other conditions such as delirium and depression, diagnosing dementia accurately is difficult (Mocellin, Scholes et al. 2008).

From a pharmacological perspective, it is imperative that the diagnosis is accurate because the incorrect use of medications can have catastrophic reactions. For example, people with DLB who are treated with conventional antipsychotics have increased risk of developing extrapyramidal symptoms³ and potentially fatal neuroleptic sensitivity⁴ (Baskys 2004).

An accurate diagnosis can also determine a person's access to medications. For example, in Australia, access to cholinesterase inhibitors (donepezil, rivastigmine and galantamine) through the Pharmaceutical Benefits Schedule (PBS)⁵ is restricted to only those patients with a diagnosis of mild to moderate Alzheimer's disease with a baseline Mini-Mental State Examination (MMSE) greater than or equal to ten (Access Economics Pty Limited 2003; Singh

³ Extrapyramidal symptoms are a group of side effects associated with antipsychotic medications. Symptoms include tremor, slurred speech, anxiety and movement disorders. Rang, H. P., Dale, M. M., Ritter, J. M. and Moore, P. K. (2003). *Pharmacology*. 5th ed. Edinburgh, Churchill Livingstone.

⁴ Neuroleptic sensitivity is an adverse reaction to neuroleptic medications, such as some antipsychotics, more common in people with Dementia with Lewy bodies. Ibid.

⁵ The PBS is an Australian Government initiative that assists in the provision of medicines at a subsidised cost.

2005; AIHW 2007b). However, it is important to note that in other instances, such as with DLB, despite having a diagnosis, these people cannot access them through the PBS (Singh 2005:58).

In terms of nursing practice, the implication of knowing a correct diagnosis is related to informing the ability of nursing and care staff to better predict behavioural changes and manifestations, which can in turn assist in planning appropriate management strategies. In acknowledgement of this, the Australian Health Ministers' Advisory Council (AHMAC) 2004 recommends that practitioners providing care to people with dementia 'should have knowledge of the most common presenting symptoms of; Alzheimer's Disease, Vascular Dementia, Frontotemporal Lobe Dementia, Lewy Body Dementia, and be aware that there are mixed dementias' (RNAO 2004). This highlights that nursing and care staff providing care for people with dementia should have appropriate training and education.

2.4.1 Obtaining a Formal Diagnosis

Cognitive decline is the most common reason for initial contact with a health professional. A number of screening tools are available to measure cognitive decline. In Australia, the most common of these tools include the MMSE, clock drawing tests, the seven minute screen, and the General Practitioner Assessment of Cognition (AIHW 2006a:13). It is recommended that a person who screens positive for cognitive decline should then be referred for further testing to confirm or reject a differential diagnosis of dementia (Black, LoGiudice et al. 2001).

In terms of achieving a diagnosis, the ICD and International Classification of Functioning, Disability & Health (ICF) should both be used as the basis for classification of dementia in Australia (AIHW 2006b:33). Current practice

recommends a structured decision-making process involving use of the MMSE, physical examination, blood screening, CT scan, ECG, CXR and EEG for early diagnosis and management of dementia in general practice. The process as described by Pond and Brodaty (2004) also recommends referral to a specialist, such as a geriatrician, psycho-geriatrician, neurologist, neuropsychiatrist or psychiatrist who has an interest in aged care, to confirm a suspected diagnosis of dementia. A similar process for reaching a diagnosis is described by Santacruz and Swagerty (2001). While this is a reasonable recommendation, it is problematic in a context like Tasmania where there were only six geriatricians for a population of 485,300 people in June 2005 (ABS 2005a).

Referral to a specialist is also problematic in Finland, where the referral rate to a specialist gerontologist, neurologist or psychiatrist decreases as the age of the patient increases, with less than half of patients with dementia having a diagnosis documented in primary care medical records (Löppönen, Räihä, Isoaho, Vahlberg and Kivelä 2003:611). Similarly, only 26 per cent of people with dementia in Sweden had a documented diagnosis and 35 per cent in the United States (US) (Olafsdottir, Skoog and Marcusson 2000).

2.4.2 Reasons for Under-diagnosis of Dementia

Obtaining an accurate diagnosis of dementia is critical in determining the appropriate management of the illness and its symptoms. However, obtaining an accurate diagnosis is complicated by a number of factors, including a lack of consensus in diagnostic criteria and differential diagnosis, social and ethical issues arising from a dementia diagnosis and limited access to specialist geriatricians. Together, this equates to an under-diagnosis of dementia.

Carpenter and Dave (2004:152) state that although ‘contemporary practice guidelines tend to promote diagnostic disclosure’ of dementia, several factors have been identified that contribute to under-diagnosis. These include: a shift in friendship networks; implications for employment; insurance coverage; discrimination; loss of driving licence; limited treatment options; and the increased risk of anxiety, depression and suicide. There are also numerous ethical issues that follow, including discussing the need for appointing a power of attorney and responsible person for medical and financial decisions, such as providing informed consent. As the term dementia is associated with cognitive decline and it is a disease that is incurable, progressive and inherited (Goodwin 2002), Teel (2004) suggests that denial among family members is also a reason for under-diagnosis. As a result, some physicians, recognising the stigma associated with the term dementia, choose terms like ‘trouble with memory’, or ‘memory difficulty’ because they perceive these to be less distressing for the patient and their family.

Under-diagnosis is a significant issue in terms of the appropriate and timely provision of care, particularly as the pharmacological management of cognitive decline is most effective in early stage dementia (see Section 2.5). Under-diagnosis is also problematic in terms of behaviour management in the residential aged care sector, as many behavioural symptoms are associated with distinct dementia pathologies.

2.4.3 Consequence of Under-diagnosis

While in the US and Australia dementia is reported to be a common diagnosis for admission to residential aged care (Souder and O'Sullivan 2003; Australian Government Department of Health and Ageing 2007a), there remains an absence

of reliable data on the numbers of residents diagnosed with dementia living in residential aged care in Australia (AIHW 2004:40). This can be attributed to inconsistencies in defining dementia, the lack of documented diagnosis and data collection strategies (AIHW 2007b). However, it is reported that of the 136,535 people in permanent residential aged care in 2002, 20 per cent were determined not to be affected by dementia. A total of 50 per cent were considered possible dementia sufferers and a further 31 per cent were estimated to fall into the probable dementia group (AIHW 2004:14). Previous estimates have suggested that at least 60 per cent of people in high-care and 30 per cent of people in low-care facilities in Australia have dementia (Rosewarne, Opie, Bruce, Ward, Doyle and Sach 1997). An accurate figure is not available, although it is suspected to be up to half of the current resident population (AIHW 2007a). This may change with the introduction of the Aged Care Funding Instrument in 2008 (see Section 4.2.2).

Definitional problems identified by the AIHW affect the quality of data collected in relation to dementia in the Australian population. Definitional issues include discrepancy in diagnostic criteria between the ICD-10 and DSM-IV (Naik and Nygaard 2008). This is problematic because unless there is consistency of diagnostic criteria and screening tools, the estimates of prevalence will remain uncertain. Without valid estimates of prevalence, adequate information cannot be provided to the public and health care providers, which in turn affects funding allocation and thereby the appropriate access and availability to care.

2.4.4 Diagnosis and Informed Consent

From a research perspective, the process of seeking informed consent from residents with dementia is influenced by the presence or absence of

documentation of dementia, i.e. obtaining consent was hindered by an absence of diagnosis of dementia. However, as discussed at the beginning of this chapter, there is an absence of reliable data on the number of people in residential aged care with dementia, which must also reflect an absence of diagnosis. The process of seeking informed consent in the absence of diagnosis is discussed further in Chapter 5.

2.5 Symptom Management

As there is no cure for dementia, there is a strong research focus on prevention and symptom management. Pharmacological symptom management relies primarily upon a group of cholinesterase inhibitors,⁶ which are thought to reduce the symptoms of Alzheimer's disease, Vascular dementia, and DLB for up to twelve months (Access Economics Pty Limited 2003:15). Donepezil (Aricept?), Galantamine (Reminyl?), Tacrine (Cognex?) and Rivastigmine (Exelon?) are examples of this category of drug currently available in Australia.

2.6 Chapter Summary

This chapter provided a broad overview of the large body of dementia literature. This review identified that the prevalence of dementia is increasing, and it is the greatest single contributor to the cost of care in residential aged care. Research on dementia has largely been undertaken from a medical perspective. Thus, there is

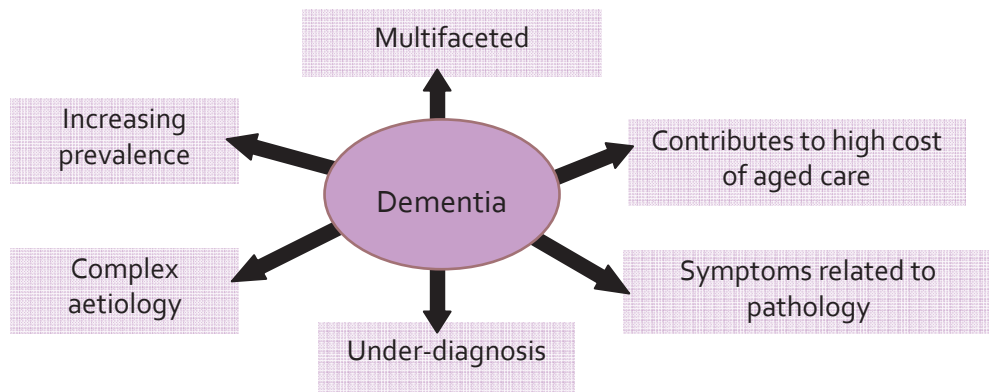
⁶ The neurotransmitter acetylcholine is reduced in the brains of people with dementia. Acetylcholine plays an important role in learning and memory in the brain. When released from storage in the brain cells into the synaptic cleft, the enzyme acetylcholinesterase breaks acetylcholine back down into choline and acetyl. The Cholinesterase inhibitors are a group of drugs that are thought to reduce the symptoms of Alzheimer's disease by inhibiting acetylcholinesterase and thereby boosting cholinergic neurotransmissions within the brain. Doody, R. S., Stevens, J. C., Beck, C., Dubinsky, R. M., Kaye, J. A., Gwyther, L., Mohs, R. C., Thal, L. J., Whitehouse, P. J., DeKosky, S. T. and Cummings, J. L. (2001). Practice parameter: management of dementia (an evidence-based review). *Neurology* 56: 1154-1166.

now considerable knowledge about the aetiology, pathology, prognosis, treatment and symptom management of dementia.

From this review of the critical literature addressing the dementia syndrome, it becomes apparent that dementia is a highly complex, multi-faceted syndrome more common in older people; and that cognitive decline is a common feature. The classification process has recognised a number of types of dementia, each with identified characteristics and different behavioural manifestations. The most common of the dementias is Alzheimer's disease. However, the accurate diagnosis of a specific dementia is difficult because of a lack of consensus in diagnostic criteria and differential diagnosis. Dementia has a predictable course and there is currently no cure.

Physically aggressive behaviour is one recognised behavioural symptom associated with many of the dementias. From the evidence, it is clear that people with vascular or fronto-temporal dementia are more likely to develop physically aggressive behaviours. However, this does not preclude its development in the other dementias. These factors have been drawn together and presented in Figure 2.2. This Figure highlights a number of important factors that affect the way the management and care provision for people with dementia. These factors include: the increasing prevalence of dementia, the economic burden of providing care to people with dementia, the multifaceted dementia illness which manifests many BoC, some of which may be related to pathology, and the limited capacity of the aged care sector to ensure each resident has undergone diagnostic procedures to identify the type of dementia.

Figure 2.2: Factor 1 Dementia



These factors arguably should form the underpinning knowledge base for the education and training of nursing and care staff. As will be discussed in Chapter 4, curriculum development in the tertiary sector does not clearly reflect this imperative. Importantly, the practical implications for nurses having this knowledge are that care for people with dementia would be informed by multiple factors which include: epidemiology, health economics, pathology, pharmacology, and capacity of the aged care sector. This knowledge base would underpin the development of appropriate models of care reflective of the complexities of the disease rather than a single model or ‘one size fits all’ approach.

In the following chapter, the focus will be on the behavioural symptoms of dementia, referred to as BoC by Alzheimer’s Australia. One key BoC is physically aggressive behaviour.

Chapter 3

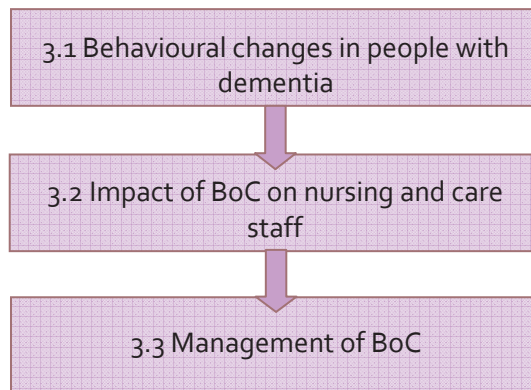
Dementia: Behaviours of Concern

The previous chapter articulated the complexities associated with the various manifestations of dementia and their concomitant behavioural symptoms. One of the key behavioural symptoms is physically aggressive behaviour, which may develop in any of the dementias but is more commonly found in vascular or fronto-temporal dementias.

This chapter will focus on the behavioural symptoms of dementia with a specific focus on the ten behavioural changes identified by Alzheimer's Australia. These are referred to as BoC. These behavioural changes are found to occur in varying frequency in all of the dementias. The chapter structure is outlined in Figure 3.1.

The literature provides an inconsistent picture as to the incidence of BoC, particularly physically aggressive behaviours in both community and residential aged care settings. The management of physically aggressive behaviour is recognised to be of concern to nursing and care staff. There are ambiguities around the impact of these behaviours; however, they are indirectly associated with increased stress and burn-out among nursing staff. The two dominant management strategies for BoC currently include pharmacological and non-pharmacological approaches, and often a combination of the two.

Figure 3.1: Chapter 3 Structure



3.1 Behavioural Changes in People with Dementia

Behavioural changes are a symptom of all of the dementias. At some point during the course of their illness, almost 90 per cent of those with dementia are expected to develop significant behavioural problems (Tariot and Blazina 1994; Allen and Burns 1995; Mega, Cummings, Fiorello and Gornbein 1996; Tariot 1999), the manifestation of which can impact heavily on caregivers (Cohen, Swanick et al. 1997; Robinson, Adkisson et al. 2001; Duffy 2003) often resulting in the person being institutionalised (Morriss, Rovner et al. 1996; Payne and Caro 1997). These behavioural changes include: wandering; agitation; resistance to care; inappropriate sexual behaviour; demanding and dependent behaviour; vocally disruptive behaviour; and physically aggressive behaviours (Richie 1996; Boller, Verny et al. 2002; Duffy 2003; Alzheimer's Australia 2004).

A number of terms have been used to describe the behavioural and psychological changes manifest in a person with dementia. These include: problem behaviours; disruptive behaviours; challenging behaviours; behavioural psychological symptoms of dementia (BPSD); and behaviours requiring special care planning. Neuropsychiatric symptoms include apathy, anxiety, agitation,

depression, delusions and hallucinations. Behavioural symptoms include wandering, physical aggression, hoarding, disinhibition and resistiveness to care.

3.1.1 BoC

In Australia, a guide has been developed by the National Dementia Advisory Service, an initiative of Alzheimer's Australia and funded by the Commonwealth Government, to assist those caring for people living with dementia (National Dementia Behaviour Advisory Service 2003). As previously highlighted, the behavioural changes associated with dementia are referred to as BoC, which is a term now used commonly in Australia. BoC is described as 'any behaviour which causes stress, worry, risk of or actual harm to the person with dementia, care staff, family members or those around them' (National Dementia Behaviour Advisory Service 2003:8). Ten behaviours are identified and these are described in Table 3.1.

Table 3.1: BoC in Dementia

Adapted from National Dementia Behaviour Advisory Service (2003). *ReBOC: Reducing behaviours of concern – a hands on guide*. Glenside, Alzheimer's Association (SA) Inc.

Behaviour	Example
Verbal disruption	screaming, strange noises, complaining
Physical aggression	hitting or hurting self or others, throwing things
Repetitive actions or questions	repeating the same sentence, question or actions
Resistance to personal care	uncooperative with showering, dressing, toileting
Sexually inappropriate behaviour	making verbal or physical sexual advances
Refusal to accept services	refusing to be seen by health professional
Problems associated with eating	refusing or forgetting to eat, overeating
Socially inappropriate behaviour	swearing, use of obscenity, undressing in public
Wandering or intrusiveness	pacing and aimless walking
Sleep disturbances	waking during the night, sleeping during the day

For the purposes of this study, the behavioural symptoms of dementia are defined as problematic when they disrupt clinical care and/or create stress for health professionals (Nay, Scherer, Pitcher, Koch, Browning, Flicker and Nugent 2003). In this thesis, the term BoC will be used when referring to the behavioural symptoms of dementia with a particular focus on manifestation and management of physically aggressive behaviours.

3.1.2 Causes of BoC

The causes of behavioural symptoms associated with dementia are unknown but are suspected to be due to either disease related neurochemical imbalances, psychological reactions to the cognitive deficits associated with the dementing process, or to concomitant physical or psychiatric illness (O'Connor 1987;

Reisberg, Borenstein, Salob, Ferris, Franssen and Georgotas 1987; Kunik, Lees, Snow, Cody, Parr, Molinari and Beck 2003) (see Chapter 2). Other factors related to the behaviour changes in individuals with dementia include: constipation; pre-illness personality or temperament; psychosis and/or depression; hallucinations; gender and patient preferences; physiological needs; pain; sleep disorders; urinary tract infections; pulmonary infections; existential needs; and medications (Sutor, Rummans and Smith 2001; Brodaty, Draper and Low 2003a; Kunik, Lees et al. 2003; Leonard, Tinetti, Allore and Drickamer 2006).

Several theoretical approaches to understanding the cause for behavioural changes in dementia have also been proposed. Cohen-Mansfield (2000), for example, proposes four major models:

1. The biological model, which explains changes in behaviour by changes in the brain.
2. The unmet needs model, in which the individual's inability to communicate and meet personal needs explains the disturbance in behaviour.
3. The behaviour model, which seeks to explain problem behaviour by learning and reinforcement theory encompassing antecedents and consequences of behaviour.
4. The environmental vulnerability model, in which the individual with dementia becomes increasingly vulnerable to environmental stimuli and overreacts to them.

All four of these models inform the implementation of behaviour management strategies, for example the environmental vulnerability model provides the

rational for the implementation of a low stimulus environment (see Section 3.3.2.3 and Section 8.2.2).

In contrast, Reisberg and Franssen et al. (2002) have suggested a theory of retrogenesis that hypothesises that those with Alzheimer's disease experience neuron death and loss of associated functions in roughly the reverse order that the cells and the functions develop from infancy to adult. This theory has similarities with the biological model and unmet needs model proposed by Cohen-Mansfield (2000) above. It is this theory of retrogenesis that Warchol (2004) uses to suggest that a person with middle stage dementia may be roughly equivalent functionally to a three-year-old and highlights that although this person may not be able to brush his or her teeth or hair, or wash his or her face, he or she can actively participate in these tasks with the appropriate amount and type of assistance. Utilising this theory may contribute to an understanding of behavioural changes and lead to a search for the cause of the behaviour rather than an acceptance and tolerance of that behavioural pattern. However, the infantilisation of elderly people with cognitive impairment may be a direct outcome of the uncritical adoption of this theory. Nay (1993; 1998) argues that care practices that include infantilisation foster dependency, loss of control and a decrease in residents' self-worth. In terms of the findings of this thesis, the use of behaviour management informed by the theory of retrogenesis has significant implications for the management of BoC.

Taking into account the cause of the BoC, the difficulty then lies in how best to manage such behaviours. To date, there is little evidence regarding how to best to manage behavioural disturbances in RACFs (Kristjanson, Currow, Glare, Parker and White 2004).

3.1.3 Incidence of Physically Aggressive Behaviour

An impetus for this study was anecdotal reports of problems of frequent physically aggressive behaviours exhibited by people with dementia in RACFs. Reviewing the considerable body of literature reporting incidence of physically aggressive behaviour uncovered a wide variation in incidence.

Determining the incidence of physically aggressive behaviour is difficult. This difficulty is partly due to definitional issues surrounding what constitutes disruptive behaviour, agitated behaviour and verbal and physically aggressive behaviours. Moreover, descriptions of BoC, particularly physically aggressive behaviours, are usually based on a subjective observation made by caregivers (Algase, Beck, Kolanowski, Whall, Berent, Richards and Beattie 1996).

Differences in methodologies also make it difficult to generalise across studies reporting incidence. For example, in a substantial review on the correlates of disruptive behaviour of the institutionalised elderly, Beck and colleagues described fourteen studies (Beck, Rossby and Baldwin 1991). Five studies used observation as the only method for data collection, three studies involved an audit of charts and forms, four comprised observations and interviews, one conducted observations, interviews and a survey, and the final study used observation, audit, interview and staff reports. Beck et al. (1991) concluded from the 5,650 subjects of these fourteen studies that the average prevalence of disruptive behaviour was 42.8 per cent.

No consistent definitive estimates of the prevalence or frequency of BoC either in the community or in residential aged care were found in the literature. Nonetheless, Byrne (2005a) states that the best estimates of the prevalence of BoC, in an epidemiologically derived sample of community-dwelling older

people with dementia was reported in the US Cache County Study (Lyketos, Steinberg et al. 2000). This study involved screening 5,092 community-dwelling older adults for dementia. From this, screening 1,002 participants (392 with dementia and 673 without dementia) undertook comprehensive neuropsychiatric examinations. These participants were also rated on the Neuropsychiatric Inventory, which involved a fully structured informant interview conducted by either a trained psychometrician or nurse. The purpose of this tool was to rate the frequency of behavioural disturbances. The US Cache County Study found that 61 per cent of participants exhibited one or more mental or behavioural disturbances in the past month and that the most prevalent symptoms were apathy (27 per cent), aggression/agitation (24 per cent) and depression (24 per cent). However, the findings were limited because the relationship of the informant to the person with dementia is not specified, which means it is impossible to determine the nature or frequency of contact between the two. This makes it difficult to determine the accuracy of their observations. At best, the reported data can only provide an indication of the frequency of the behaviours.

Despite Byrne's (2005b) support of the US county study, he argued that the prevalence of BoC would be much greater in nursing home populations than in a community-based sample. The prevalence of BoC in a community-based sample was explored by psychiatrists in a US study who rated 541 community-dwelling patients with dementia using the Psychogeriatric Dependency Rating Scale using information from patient examination, observation, and caregiver interviews. They reported that fifteen per cent had exhibited physically aggressive behaviour during the two weeks before the evaluation (Lyketsos, Steele, Galik, Rosenblatt, Steinberg, Warren and Sheppard 1999).

There are many other examples in the literature where estimates of the prevalence of specific behaviours are studied and reported. Cohen-Mansfield, Werner and Marx (1990) determined the frequency of screaming by residents with dementia living in a long-term care facility. Their study asked nurses to retrospectively report on 408 residents' screaming using the Cohen-Mansfield Agitation Inventory. The result indicated that 25 per cent of the residents studied screamed four or five times a week.

In an attempt to overcome some of the methodological problems identified in other studies (such as potential biases and inaccuracies of retrospective ratings), Ryden and colleagues undertook an observational study using the Ryden Aggression Scale (RAS). The RAS was completed by nursing staff across four nursing homes over a seven-day period involving 124 residents. The RAS is a 25-item Likert-type scale used to measure the nature and frequency of aggressive behaviour. In this study, some form of aggressive behaviour was found in 86.3 per cent of the residents studied (Ryden, Bossenmaier et al. 1991).

In yet another study undertaken by Souder, Heithoff, O'Sullivan, Lancaster and Beck (1999b), nursing staff used the Disruptive Behaviour Scale to assess the behaviours of 240 patients in a large US Veterans' Administration Medical Centre over a 24-hour period. The findings reported that over the observed 24-hour period, the average frequency of disruptive behaviour was 3.6 per resident.

In reviewing the literature, Pulsford and Duxbury (2006) argued the general consensus of a high incidence of usually low-impact aggression among people with dementia. They cite Åström and colleagues, who report that in a sample of 848 residential aged care nursing and care staff in Sweden, 11.4 per

cent reported being exposed to aggression from residents during the one year period of the study (Åström, Karlsson, Sandvide, Bucht, Eismann, Norberg and Saveman 2004). Several other studies have focussed on determining the extent of physically aggressive behaviours directed toward caregivers. One study using focus groups with caregivers and nursing directors reported that violence occurred frequently and was of serious concern to most of the caregivers, although no numeric value was attached to 'frequently' (Gates, Fitzwater and Meyer 1999). In a survey administered to 342 community caregivers, the authors found that 33 per cent of dementia patients directed physically abusive behaviours toward their caregivers (Coyne, Reichman and Berbig 1993). In an Australian study, in-depth interviews and a semi-structured survey administered to 39 female primary caregivers (24 spouses and fifteen non-spouses) revealed that 89 per cent of carers of people with dementia reported they had experienced some form of aggression, and that serious violence was experienced by 26 per cent of the sample (Cahill and Shapiro 1993).

A survey of care staff working in a Swedish nursing home found that 55 per cent had been exposed to violence (88 per cent of which was physical violence) from residents, and that eighteen per cent reported this occurred daily (Åström, Bucht, Eismann and Norberg 2002). However, it was not clear what proportion of the residents had dementia. In another Swedish study, Registered Nurses, assistant nurses and nurses aides working in nursing homes, sheltered housing and group-dwellings (n=848) had been encouraged to report all incidences they perceived to be violent or harmful toward themselves. This study revealed that 10.3 per cent of care staff had been exposed to violence from residents (Åström, Karlsson et al. 2004).

In the study by Souder and colleagues discussed above (Souder, Heithoff et al. 1999b), the frequency of disruptive behaviour was reported to increase during periods of inactivity, such as sitting, walking and awaiting meals or medications. Other observational studies have identified that disruptive behaviour increases when the person is exposed to loud noise (Nelson 1995; Barratt 2002). Using staff observation to complete the Ryden Aggression Scale, the frequency of aggressive incidences was observed to increase after touch or the invasion of personal space, which occurs as part of the caregiving process (Ryden, Bossenmaier et al. 1991).

Although a number of studies exploring the frequency of BoC including physically aggressive behaviour are found in the literature (Cohen-Mansfield, Werner et al. 1990; Beck, Rossby et al. 1991; Cohen-Mansfield 1999; Lyketoso, Steele et al. 1999; Souder, Heithoff et al. 1999b) none of these studies investigate the interconnected relationships between the frequency of physically aggressive behaviours and a number of important variables. These include: care staff understandings of dementia; staff education and experience; and the psychosocial and physical environment of the RACF. Nor did these studies explore the experiences of Registered Nurses and Personal Care Assistants working in the aged care sector who were providing the day-to-day care of people with dementia in an environment that is recognised to be under-funded and under-staffed.

The estimates as to the incidence of physically aggressive behaviours in people with dementia are inconsistent. Estimates range from very low incidence to very high incidence. For example, 10.3 per cent to 89 per cent of care staff are reported to be exposed to physically aggressive or abusive behaviours and fifteen per cent to 86.3 per cent of residents have been reported to exhibit aggressive

behaviours. This review has identified a range of methodological approaches to determine frequency over different periods. Problems were also identified with definitions about what constitutes aggressive behaviour. Further concerns have been raised in relation to the collection of retrospective data that relies on staff recall of frequency of behaviours (see Section 5.10.4). Variance across community and residential care setting were also found. Thus, it is difficult to know how to make judgements about estimates. Although there is a sense that while it is not possible to know definitively the extent of the problem of physical aggressive behaviours, the consensus is that it is not insignificant, and needs to be addressed. This is evidenced by the number of studies addressing this issue.

Regardless of the estimated prevalence of physically aggressive behaviour, a number of scholars argue that the reporting of aggressive incidents may underestimate the ‘true’ incidence of the phenomenon (Gates, Fitzwater et al. 1999; Wilkinson 1999; Gates, Fitzwater and Deets 2003; Badger and Mullan 2004). While definitional problems discussed previously (see Section 3.1.3) clearly have an impact, Gates, Fitzwater and Meyer (1999) argue that problems with determining the true incidence of physically aggressive behaviours are related to staff not interpreting many BoC as ‘aggressive’, because they do not consider residents with dementia to be responsible for their actions and do not intend to harm others. Further, under-reporting of aggressive incidents in health care settings have also been attributed to a range of reasons, including not wanting to increase the paper work of supervisors (Gates, Fitzwater et al. 1999), ‘rock the boat’, or be blamed by supervisors (Lion, Snyder and Merrill 1981; Rosenthal, Edwards, Rosenthal and Ackerman 1992; Sommargren 1994).

Therefore, when the various methods undertaken to determine the frequency of BoC are considered together with claims of under-reporting of physically aggressive behaviour, it is arguable that physical aggression exhibited by people with dementia is a significant issue.

3.1.4 Factors Affecting the Manifestation of Physically Aggressive Behaviour

A number of factors have been identified as antecedents to the manifestation of BoC and physically aggressive behaviour. One of these identified in the literature is the way service providers structure their care. For example, Skovdahl, Kihlgren and Kihlgren (2003) report on a study that explored the experiences of fifteen formal caregivers providing care for elderly residents who had dementia and who exhibited physically aggressive behaviours. Interviews with the caregivers revealed that substantial support was needed for staff to assist them to cope with demanding situations, such as aggressive residents. Support included positive feedback and good leadership. This study also found that caregivers who strive to understand the meaning behind a resident's behaviour and master the necessary caregiving skills could be more successful at curbing distressing behaviour. In another Swedish study, caregiver-resident interactions during morning care were studied using video recordings and stimulated recall interviews to explore insight into the reasoning of caregivers who reported problems when dealing with people with dementia (Skovdahl, Kihlgren and Kihlgren 2004). The focus of the carer during the provision of intimate care may contribute to how resident behaviours are interpreted and therefore reported. From these studies, it appears that carers who are focussed on the completion of their tasks, in this case the morning shower, reported having more problems dealing with the resident and the aggressive behaviour. In contrast, the focus for those carers who were satisfied

with their ability to manage aggressive behaviour was on sustaining a positive interaction with the resident, with less of a task focus. Key to the outcomes of both these studies was a recommendation that caregivers should act in a sensitive and reflective manner with a focus on the individual rather than the task. This recommendation is problematic in the Australian context given that care to people with dementia is predominantly provided by people with little training in a context that is driven by the cultural imperative of ‘getting the job done’ (see Section 4.3).

3.1.5 The Sundowning Phenomenon

Another factor that has been associated with affecting the manifestation of BoC is the time of day. The appearance or exacerbation of BoC in the afternoon and/or evening hours is commonly referred to as sundowning (Volicer, Harper, Manning, Goldstein and Satlin 2001:704). There is disparity in the literature as to the timing of sundowning (Dewing 2003) and no agreed cause of the phenomenon. A number of theories have been proposed to explain sundowning, including: unmet physical or psychosocial needs; sleep disorders; type of dementia; disordered circadian rhythms; and/or inadequate exposure to light during the day (Bachman and Rabins 2006). The literature suggested that these peaks would occur in the mornings during hygiene care (Ryden, Bossenmaier et al. 1991), or in the afternoons between 3pm and 7pm (Cohen-Mansfield, Watson, Meade, Gordon, Leatherman and Emor 1989; Wallace 1994). The significance of the sundowning phenomenon is that it might be related to variations in the manifestation and reporting of aggressive incidents and therefore should inform the sampling times for this study.

3.2 Impact of BoC on Nursing and Care Staff

A key focus of this thesis relates to the extent to which physically aggressive behaviour by people with dementia are of concern to nursing and care staff. This is an appropriate question because while the literature does identify that the manifestation of BoC are problematic for nursing and care staff it does not identify to what extent or why they are of concern.

3.2.1 Impact of BoC on Time Management

The management of BoC has been reported as particularly time consuming. For example, a discussion paper Duffy (2003) proposes that disruptive behaviours including aggression 'consume an inordinate amount of administrative and staff time'. Souder and O'Sullivan (2003) clarify this statement with data from a descriptive study of 153 residents in an American Veterans' Affairs institution. In this study, the Disruptive Behaviour Impact Assessment tool (Souder and O'Sullivan 2003) was used by nursing staff to calculate the time taken to manage disruptive behaviours. Data related to time to manage disruptive behaviours were collected in 21 consecutive shifts for each resident using the Disruptive Behaviour Impact Assessment (DBIA) (Souder, Heithoff, O'Sullivan, Lancaster and Beck 1999a). Findings showed that 36 behaviours occurred during the shifts studied and that it took staff an average of 23.4 minutes to manage a disruptive behaviour (ranging from five to 211 minutes).

While no other literature was found that confirmed or disputed this finding, it raises a significant resources issue associated with the management of BoC. This is particularly the case in Australia, where workforce shortages and

lack of time have been identified as significant issues for residential aged care. This issue will be addressed in detail in Section 4.2.3.

3.2.2 Impact of BoC on Stress and Burn-out

Regardless of the resource implications, stress and burn-out among nursing and care staff as a consequence of resident aggressive behaviour have been identified as another key issue. For example, Evers and colleagues (2002) explored the relationship between the experience of aggressive behaviour and burn-out of carers working in residents in homes for the elderly in the Netherlands. Although not explicitly stated, it seems as though the sample is taken from care staff who had undertaken some form of vocational training. Two surveys (the Maslach Burn-out Inventory and the Experienced Aggressive Behaviour) were administered to 1,172 carers working in 33 homes, with 551 returned completed. The study findings revealed that staff frequently experienced physical aggression from residents, and this led to the emotional exhaustion and depersonalisation of care staff. Emotional exhaustion was related to the number of hours worked each week, and to physical and psychological aggression. Depersonalisation was related to psychological aggression. Depersonalisation in the context of this study was not defined.

In an Australian study, Rodney (2000) also used a survey to examine the relationship between aggressive behaviour displayed by people with dementia and nurses' stress. The survey was administered to 102 Registered Nurses, Personal Care Assistants and direct-care workers employed across fifteen nursing homes. Respondents were asked to consider the behaviours of the least aggressive and most aggressive resident in their care and complete the Rating Scale for Aggressive Behaviour in the Elderly (Patel and Hope 1992). This 21-item scale

assesses four areas of aggression (verbal aggression, physical aggression directed at objects, physical aggression directed against others and physical aggression directed against oneself). This study found that interacting with a highly aggressive resident produces significantly more stress than interacting with a less aggressive resident.

Three tools (the Screaming Behaviour Mapping Instrument, the Cornell Scale for Depression in Dementia and the Dementia Behaviour Disturbance Scale) together with other measures of cognition, functioning and social interaction were used as part of another Australian study undertaken to identify factors associated with vocally disruptive behaviour in nursing home residents (Draper, Snowden, Meares, Turner, Gonski, McMinn, McIntosh, Latham, Draper and Luscombe 2000). Twenty-five nursing home residents with vocally disruptive behaviours were participants in this study. Vocally disruptive behaviour was found to be associated with resident depression, severe dementia, social impairment, the use of psychotropic medications, and the emotional distress of the nursing staff. The emotional distress of nursing staff was measured using the Modified Emotional Reactions Scale. This word association tool revealed that residents' verbally disruptive behaviours cause staff significant frustration, anxiety, and anger, which was directed at the residents. Due to the extent of these findings, the authors argued that resident referral to aged care outreach services may be more related to the stress experienced by nursing home staff managing vocally disruptive behaviour than to the specific attributes of vocally disruptive behaviour itself.

The negative impact of some of the BoC, particularly aggressive behaviour, is also evident in the findings of an American study that involved

focus group discussions with a sample of 54 caregivers and six nursing home directors from six nursing homes. In this study, the caregivers stated they had all experienced aggressive behaviour from residents and that they lacked the formal education and training needed to care for aggressive residents. Reporting practices were driven by the medical attention required. If no one was injured, they were reluctant to report because five of the six nursing homes required drug testing for all incident reports. Staff reported they felt anger toward violent residents, which affected their attitudes and care toward those people (Gates, Fitzwater et al. 1999). Clearly, staff stress attributable to resident aggression has negative implications for the care delivery to nursing home residents.

3.2.3 Impact of Physically Aggressive Behaviour on the Workplace

Stress attributable to physically aggressive behaviour is clearly a concern. In a report commissioned by the International Labour Organisation in Geneva, the cost of violence at work, which includes physically aggressive behaviour from residents in nursing homes, leads to: increased absenteeism and sick leave of nursing staff; property damage; decreased productivity; increased security costs; litigation; workers' compensation; reduced job-satisfaction; and recruitment and retention issues (Hoel, Sparks and Cooper 2000).

This report and the above studies clearly highlight the negative implications associated with aggressive behaviour among nursing home residents. In some ways, it is not surprising to find that in Australia the aged care sector remains in the top five most injurious industries in Australia (Grealley 2005), with a substantial number of these injuries attributable to resident behaviours directed towards nursing and care staff. Two Australian studies, in Tasmania and in South Australia, explored this phenomenon.

The Tasmanian study reported on the occurrence of workplace aggression directed against nurses in general (Farrell, Bobrowski and Bobrowski 2006). A survey was administered to all nurses registered with the Nursing Board of Tasmania (n= 6326) with a 38 per cent response rate (n=2407). Findings indicated that 63.4 per cent of respondents indicated they had experienced some form of aggression in the four weeks prior to the survey, and the greater proportion (68.9 per cent) were nurses working in the aged care/dementia contexts. These nurses had experienced verbal abuse and almost half (48.8 per cent) had experienced some form of physical abuse. The issue of physical abuse was considered serious, as 24 per cent of respondents (all nurses, not only those employed in aged care) had considered resigning on account of workplace aggression. In addition, workplace abuse contributed to nurses' distress, undermined their productivity, increased their potential to make errors and negatively influenced their desire to stay in nursing. However, the respondents were reluctant to make their complaints 'official'.

The South Australian study examined issues around workers' compensation claims. This WorkCover Corporation funded project utilised a skill, education and injury survey of 193 aged care workers employed in nursing homes (Grealy 2005). The findings highlighted that resident aggression and resistance to care were the cause of staff injury in 37.9 per cent (n=103) of incidents. As a consequence, 32.8 per cent (n=39) made workers' compensation claims and 39.3 per cent (n=64) identified resident behaviour as the cause of unreported injuries (Grealy 2005). The latter figure highlights the extensive non-reporting of staff injuries in the aged care sector, which is consistent with the under-reporting of aggressive behaviours identified by other studies referred to previously (Gates,

Fitzwater and Meyer 1999; Wilkinson 1999; Gates, Fitzwater and Deets 2003). The need for an accurate medical diagnosis of dementia was one recommendation given to assist nursing and care staff in the anticipation of behaviours and therefore prevention of injuries.

3.3 Management of BoC

The significance of the impact of BoC and physically aggressive behaviour is reflected in the large amount of research conducted in this area. The previously cited studies have identified that resident physical aggression is a general issue in both nursing homes and the community setting, but how and why it is an issue has not been clearly identified in any detail. In recognition of the issues associated with management of behavioural symptoms, a number of studies have been undertaken. Two distinct management approaches have evolved, a pharmacological and a non-pharmacological approach, the latter of which focuses on environmental manipulation.

Best practice dementia care focuses on a multidisciplinary approach to the management of BoC, which incorporates both pharmacological and non-pharmacological approaches. The multidisciplinary approach is directed toward interdisciplinary collaboration and consultation to develop an approach that is individualised for each resident (Nay, Scherer et al. 2003). Brodaty and colleagues (2003a) have proposed a seven-tiered model of service delivery for the management of the behavioural and psychological symptoms associated with dementia. This model reflects the multidisciplinary approach, but goes further by recommending that physically aggressive behaviour required management in a

specialist care unit. While this is a well founded recommendation, access and availability to such units is a concern, particularly in Tasmania.

Therefore, given that Phase 1 included 12 RACFs without a specialist care unit, and that Phase 2 of the present study was undertaken in Tasmania in a facility without a specialist care unit, it is important to address both the pharmacological and non-pharmacological approaches to the management of BoC. Together, these approaches represent the front-line behaviour management strategies utilised in the majority of these Tasmanian facilities, as neither approach is sufficient to be used alone.

3.3.1 Pharmacological Management of BoC

BoC are problematic for care staff, as indicated previously (see Section 3.2). In an attempt to manage or reduce behavioural problems, residents in both the community and residential aged care setting manifesting BoC are more likely to be prescribed antipsychotic agents, such as haloperidol or thioridazine (Knopman and Sawyer-DeMaris 1990; Hantikainen and Käppeli 2000; Coulson, Fenner and Almeida 2002), or to be managed with physical or chemical restraints (Gallinagh, Nevin, McIllroy, Mitchell, Campbell, Ludwick and McKenna 2002).

Antipsychotics (Doody, Stevens et al. 2001), atypical neuroleptics (for example, risperidone, olanzapine, quetiapine, ziprasidone) and anticonvulsants (for example, valproic acid or carbamazepine) (Stewart 2006) are all prescribed to treat agitation, physically aggressive behaviour and psychosis in patients with dementia. Risperidone, used widely as an antipsychotic, has been established as a safe and effective drug for the treatment of schizophrenia. However, recent studies have shown that in relatively low doses it is also effective in reducing the

severity and frequency of aggressive symptoms in elderly patients with dementia, and that it is well tolerated by these patients (De Deyn and Katz 2000).

Neuroleptic drugs are prescribed to treat delusions and hallucinations. Quetiapine has been reported to reduce psychiatric manifestations of DLB without causing neuroleptic sensitivity or increasing extrapyramidal symptoms (Baskys 2004). Other drugs trialled have included: Selegiline, which may improve mood; Trazodone, which may decrease irritability, aggression, restlessness and inappropriate vocalisations; anti-convulsants, such as the use of Carbamazepine or Lithium to decrease agitation; and Sodium Valporate and beta blockers for aggression management (Davidson 1998).

However, due to a reduction in renal clearance, slowing of hepatic metabolism, and a diminished body mass that occurs as a normal part of ageing, there is an increased potential for catastrophic side effects when antipsychotic drugs are administered to the frail elderly (Trehan 1998). Side effects of antipsychotic drugs include rigidity, gait impairment, dysphagia and decreased dexterity, increased risk of falling, and paradoxical increases in agitation (Corrigan 1989; Knopman and Sawyer-DeMaris 1990; Tiziani 1999). Marked sensitivity reactions to antipsychotics can occur among people with DLB, including delirium, severe parkinsonism, states resembling neuroleptic malignant syndrome,⁷ and even sudden death (McKeith, Fairbairn, Perry, Thompson and Perry 1992; Baskys 2004). Due to the potential for mismanagement, prescribing and administering medications to elderly people requires an understanding of the

⁷ Neuroleptic malignant syndrome is a life threatening hypersensitivity reaction characterised by muscle rigidity and hyperthermia, related to acute dopamine depletion from the use of neuroleptic drugs, for example haloperidol. Rang, H. P., Dale, M. M., Ritter, J. M. and Moore, P. K. (2003). *Pharmacology*. 5th ed. Edinburgh, Churchill Livingstone.

complexity of interactions between polypharmacy, comorbidity and age-related changes in pharmacodynamics and pharmacokinetics (ELDesoky 2007).

Lyketsos and colleagues (1999) argue the pharmacological approach to the management of BoC needs to be undertaken with extreme caution because of the potential for a dual diagnosis of dementia and depression. This is important because there is evidence to suggest that aggression is strongly linked with the presence of depressive symptoms, and thus one form of management of aggression may be to identify and treat depression in dementia (Lyketsos, Steele et al. 1999). This is an significant association because an extensive study of residents in Australian aged care homes found that 51 per cent of high-care residents are over the threshold for depression on the Geriatric Depression Scale, a figure similar to that found in the US and United Kingdom (UK) (The Hammond Care Group 2004). Trials have been conducted to evaluate the effectiveness of fluvoxamine, fluoxetine, citalopram and trazodone in behaviour modification, with both citalopram (Nyth, Gottfries and Lyby 1992) and trazodone (Lebert, Pasquier and Petit 1994) showing some potential benefits.

However, due to concerns regarding the pharmacological management of BoC, and criticisms of current prescribing practices in nursing homes, US legislation introduced the *Omnibus Budget Reconciliation Act 1987*, which recommended a reduction in the use of psychotropic medications and required those prescribers in Medicare or Medicaid to re-evaluate their methods of behavioural control (Smith 1990; Tabloski and Williams 1998). Prompted by the passage of this act, a review of medication use in North American elderly nursing facility residents highlighted that over sixteen per cent of facilities had 50 per cent of their residents receiving at least one potentially inappropriate medication and

20 per cent of their residents receiving a medication with serious potential for an adverse outcome (Hume, Lapane, Middleton, Gambassi, Barbour and Mor 1998).

Similarly, in Australia it is recognised that there is a role for the use of psychotropic medications in residential care. The prescription and administration of psychotropic medications is conducted under the guidance of a Medication Advisory Committee, as specified by the Australian Pharmaceutical Advisory Council's (APAC) *Working Party on Quality Use of Medicines in Nursing Homes and Hostels* (NSW Health 2000). The APAC group has recommended that a formal review of the use of psychotropic medications should be undertaken between the prescriber and an accredited pharmacist at least every six weeks. There is no evidence to suggest this occurs as recommended.

The administration of medications in residential aged care is particularly problematic due to funding and staffing shortages (see Section 4.2.3). In the Australian Capital Territory, for example, Enrolled Nurses without medication training can administer medications from a Webster-pakTM⁸ because the pharmacist is considered to be dispensing the medication (ACT Nursing & Midwifery Board 2007). This is a concern as an interpretation such as this may be extrapolated to Personal Care Assistants, giving them the opportunity to administer medication without any relevant education on pharmacokinetics and pharmacodynamics (Reinhard, Young, Kane and Quinn 2006).

The pharmacological management of BoC is complex, particularly as the patients are elderly. The reduced capacity for the frail aged to metabolise psychotropic medications is identified, as well as the potential for the

⁸ Webster-pakTM is a multi-dose, individually prepared blister pack in which a pharmacist places prescribed medications. It is divided into 28 separate blister wells in four rows of seven, being the doses to be taken at breakfast, lunch, dinner and bedtime on each day of the week. From <http://www.mirijini.com/products231.htm> accessed 12 June 2008.

mismanagement of aggression because of neglect in treating depression. These problems, together with the likelihood of polypharmacy (ELDesoky 2007; Hayes, Klein-Schwartz and Barrueto 2007; Mocellin, Scholes et al. 2008) and increased falls (Ziere, Dieleman, Hofman, Pols, van der Cammen and Stricker 2006), should raise serious concerns for aged care nursing practice, particularly in terms of who should be administering medications; the ongoing education of those administering medications (which ideally should focus on new medications, side effects and adverse interactions); and how often resident medications should be reviewed by a medical practitioner or pharmacist. This issue is also of concern given the workforce issues facing the aged care sector. The pharmacological management of BoC is very complex, particularly in a sector with limited access to doctors and pharmacists and ongoing problems in terms of recruitment and retention of an adequate number of Registered Nurses. No study was found that addresses the capacity of RACFs to manage complex pharmacological regimes with a largely unregulated workforce.

3.3.2 Non-pharmacological Management of BoC

The non-pharmacological management of BoC is a growing area of research and nursing practice and has an increasing profile in the context of Australian RACFs. Its primary focus is managing BoC through manipulating the physical environment. This approach recognises that the environment may be a critical factor in the management of BoC. Understanding how a person with dementia interprets and interacts with their environment can assist in the development of management strategies to maintain the functioning status of that person through physical cues, social cues, physical stability and social stability. This is because the pathological processes of dementia interrupt the normal sensory and cognitive

processes used to collect and interpret environmental information (Roberts and Algate 1988).

The close relationship between poorly met psychosocial needs and an increased level of disruptive behaviours has been well documented (Roberts and Algate 1988; Kolanowski, Hurwitz, Taylor, Evans and Strumpf 1994). Several theories and models of care have been presented that recognise the importance of the psychosocial and physical environment in contributing to the effective management of BoC (Hall and Buckwater 1987; Kitwood and Bredin 1992; Nelson 1995; Kitwood 1997; Werezak and Morgan 2003; Warchol 2004).

As a consequence, there is now some evidence to suggest that people with dementia may exhibit a decrease in problem behaviours with one or more psychosocial approaches or therapies (Opie, Rosewarne and O'Connor 1999; Doody, Stevens et al. 2001). These approaches and therapies include playing music (Knopman and Sawyer-DeMaris 1990; Brotons and Pickett-Cooper 1996; Ragneskog, Asplund and Kihlgren 2001; Chavin 2002), particularly during meals and bathing, walking or other forms of light exercise, simulated presence therapy (videotaped or audio-taped family), massage and aromatherapy (McMahon and Kermode 1998), pet therapy, bright light therapy (Thorpe, Middleton, Russell and Stewart 2000), sensory gardens, Snozelen rooms, doll therapy (Godfrey 1994; Andrew 2006; Mackenzie, James, Morse, Mukaetova-Ladinska and Reichelt 2006), carer education, cognitive remediation, and behavioural therapy (Proctor, Burns, Powell, Tarrier, Faragher, Richardson, Davies and South 1999; Teri, Logsdon, Peskind, Raskind, Weiner, Tractenberg and Foster 2000).

In addition to the implementation of the psychosocial approaches, the modification of the physical environment is an approach growing in popularity.

Environmental manipulations can include: ensuring the environment is safe for wandering; provide care in small areas with small numbers of residents; keeping the environment simple with good visual access so staff can locate residents; reducing unnecessary stimulation; highlighting helpful stimuli; providing for planned wandering; making the environment as familiar as possible; providing separate spaces for privacy and for community activities; providing space for visitors, and making the environment as domestic as possible (Fleming, Forbes and Bennett 2003:11).

A substantial review of the empirical research undertaken on the effectiveness of such environmental modifications (Day, Carreon and Stump 2000) concluded that modifications to the physical environment can have a positive influence on the care of people with dementia, and on the management of BoC. Over 70 papers were included in the review.

However, in commenting on this body of research, Day, Carreon and Stump (2000) noted that although numerous design methods had been used (including quasi-experimental, pre-test/post-test, survey, longitudinal and ethnographic studies) not many have been used in a comprehensive study, and that much of the research on dementia and design comprises small sample sizes. This raises some concern as to the validity and generalisability of the findings.

In a review of 63 studies on the effect of environmental interventions on well-being in persons with dementia, Gitlin and colleagues suggested that environmental approaches to managing challenging behaviours and/or promoting the well-being of the person with dementia focus on four levels (Gitlin, Liebman and Winter 2003). The first of these levels is to 'relax rules', such as removing locks on doors, allowing safe wandering, and by providing education and training

to caregivers. The second level is directed toward the orientation and spatial awareness of the person with dementia. The third is the creation of a low stimulus, comfortable environment using multi-sensory modalities. The final level is to provide predictability, familiarity and structure in the daily life of the person with dementia (Gitlin, Liebman et al. 2003). Their review concluded that 90 per cent of the 63 studies reported positive outcomes using one or more of these levels. However, Gitlin and colleagues argue that most were methodologically flawed and for the most part were reliant on small sample sizes, due to the qualitative nature of the studies.

However, in a study undertaken in Australian nursing homes examining the relationship between aggressive behaviour and various environmental characteristics of the nursing home, no significant relationship was found. Although the authors suggested that methodological issues may explain the lack of association between aggressive behaviour and the environment (Shah, Chiu and Ames 2000), this finding does add weight to Gitlin and colleagues' methodological concerns and raises further concerns as to the findings in the studies they reviewed.

Although there seems to be limited firm evidence in the literature to support the positive outcomes of environmental manipulation for the management of care for people with dementia, anecdotal evidence suggests these methods are generally accepted by practitioners as having some effect in the management of BoC. In Tasmania, for example, RACFs are actively undertaking the implementation of some of these interventions: there is a mobile SnoezelenTM unit travelling around the state; a number of facilities are implementing various forms of the Eden Alternative; and others are exploring options for including a low-

stimulus environment within their facility. These interventions are briefly discussed below as they form part of the RACF context in which the staff and residents in this study are operating.

3.3.2.1 SnoezelenTM Rooms

In SnoezelenTM rooms, visual, auditory, olfactory and tactile stimuli are provided. These stimuli require no recognition on the part of the resident, nor any high-level cognitive processing (Baker, Dowling, Wareing, J. and Assey 1997).

While many reports on the use of SnoezelenTM are anecdotal, other more formal studies have reported on the positive outcomes of older people experiencing multi-sensory stimulation, such as that provided in SnoezelenTM rooms. In a randomised, controlled trial comparing the effect of SnoezelenTM sessions on 31 people with Alzheimer's disease or vascular dementia with a control group, behaviours were assessed by nursing staff using a number of observational tools. Findings from this study provided high-level evidence that participants of the SnoezelenTM showed a significant decrease in socially disturbed behaviour at home. An improvement in mood, recall and conversational ability was noted during the SnoezelenTM sessions (Baker, Dowling et al. 1997).

The physiological and behavioural effects of SnoezelenTM in dementia were also investigated in a randomised control pilot study at an elderly person psychiatry day hospital (van Diepen, Baillon, Redman, Rooke, Spencer and Prettyman 2002). Ten people with a clinical diagnosis of dementia, who were rated by staff as exhibiting significant agitated behaviour, were recruited for the trial. The Clinical Dementia Rating Scale and the MMSE were used to determine participants' dementia severity and cognitive impairment. The Cohen Mansfield Agitation Inventory (Cohen-Mansfield 1991) and the Agitation Behaviour

Mapping Instrument (Cohen-Mansfield, Werner and Marx 1989) were used together with a specifically designed tool, Interact, to measure the effects of SnoezelenTM. A trend in decreased agitation was found after four weeks.

Although the above studies both utilised subjective, observational methods, they both concluded that SnoezelenTM sessions can be used for reducing agitation and socially disturbed behaviour in people with dementia.

3.3.2.2 The Eden Alternative

The Eden Alternative (Thomas 1999) advocates that treatment gardens and pets are part of therapeutic outdoor environments that can positively affect resident behaviour, mood, depression, social interaction, sleep patterns, awareness, orientation and special negotiation (Brawley 2002; Tyson 2002). The Eden Alternative encourages resident and staff participation in the daily care of aromatic and tactile gardens, and pets such as fish, cats and small dogs. It also encourages the location of child care centres on the same site so residents can hear and see children at play and, where appropriate, they can be involved in activities such as reading to children (Barba 2002; Barba, Tesh and Courts 2002). A survey of certified nursing facilities in the US found that 22 per cent of the 378 facilities were currently following the Eden Alternative, and a further 28 per cent were planning to adopt it (Tesh, McNutt, Courts and Barba 2002). Moreover, the rise in popularity of the Eden Alternative with its 'emphasis on avoiding the plagues of loneliness, helplessness and boredom' has been praised as an effective approach to also managing depression in residents in aged care facilities (The Hammond Care Group 2004:28). Reported benefits of the Eden Alternative also include reduced medication rates for patients, lower staff turnover and lower rates of patient infection. For example, the Texas Long Term Care Institute in San

Marcos studied six Eden Alternative nursing homes from 1996 to 1998. Six homes participated in the study and included approximately 700 beds. Data were collected using surveys for roughly 1,400 residents over the two-year period. These homes reported: a 60 per cent decrease in resident behavioural incidents; a 57 per cent decrease in the beginning stages of pressure sores; a 25 per cent decrease in the number of residents confined to their beds; an eighteen per cent decrease in the use of restraints; a 48 per cent decrease in staff absenteeism; and an eleven per cent decrease in employee injuries (Ransom 2000).

3.3.2.3 Low Stimulus Environments

Environmental manipulation can also encompass low stimulus approaches to the management of BoC, which has been reported to reduce confusion and anxiety in people with dementia (Hall, Kirschling and Todd 1986; Hall and Buckwater 1987; Cleary, Clamon, Price and Shullaw 1988), and has been utilised as an option for moderating agitated and aggressive behaviours (Kovach 2002). Low stimulus approaches to the management of BoC are based on the Progressively Lowered Stress Threshold (PLST) model (Hall and Buckwater 1987). The PLST model proposes that a person with dementia is less able to manage stress as the disease progresses. This means that environmental conditions need to be modified to prevent stress accumulating during the day, which manifests as dysfunctional behaviours (Smith, Gerdner, Hall and Buckwater 2004).

3.4 Chapter Summary

This chapter focussed on the behavioural symptoms of dementia, referred to as BoC, and identified a number of theories explaining why BoC may occur. Concerns were raised as to what extent the prevalence of BoC reported in the

literature is reflective of what actually occurs. Several factors may contribute to this uncertainty, making determining prevalence problematic. These include: definitional issues surrounding the behaviours; the subjectivity of descriptions of behaviours from carers; and the complex issues around reporting of incidents of physically aggressive behaviour. There has been an array of methodologies employed to determine the prevalence of BoC and physical aggressive behaviours, which means that it is difficult to compare across studies. There are also contextual and temporal factors that are implicated in the manifestation of BoC. Clearly, BoC are very complex phenomena that involves multiple disease aetiologies and antecedents, the manifestation of which must affect nursing and care staff.

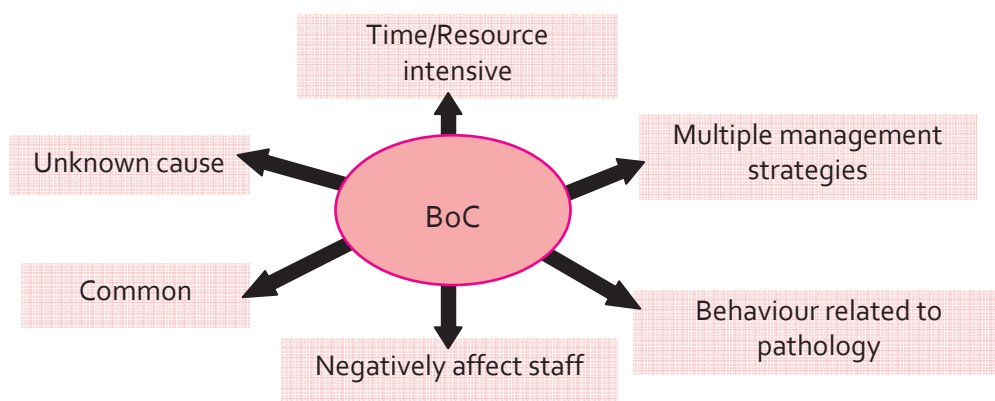
Based on studies to date, resident physically aggressive behaviours have been identified as problematic within the residential aged care sector. The management of physically aggressive behaviours require a large amount of staff time. The impact of physical aggression has been indirectly associated with increasing staff stress, and with workplace issues, including staff injury, absenteeism, recruitment and retention. Nursing staff stress is further linked to a decrease in productivity, as well as emotional exhaustion, frustration and anger directed toward residents.

There are numerous options available for the management of BoC, with two distinct approaches dominating the literature: the medically focussed pharmacological approach and the non-medical, non-pharmacological approach. The pharmacological management of BoC is the focus of a substantial body of research. The efficacy and side effects of medications prescribed to manage the behavioural changes associated with dementia are well documented in the

literature. However, it is of particular concern that several studies have exposed the negative side effects of many of the antipsychotic medications when used to treat older adults.

As an alternative to the pharmacological management of BoC, many non-pharmacological approaches have emerged. These include: Snoezelen™ sessions, the Eden Alternative, and the adoption of a low-stimulus environment within RACFs. Although there are several studies reporting on the positive effects of these management approaches, the quality of evidence is low, at best. However, the implementation of these strategies appears to be high. These factors have been drawn together and represented in Figure 3.2. This figure highlights how BoC are a symptom common to many people with dementia. BoC generally have no known cause but are often related to the type of pathology present. BoC negatively affect staff, require multiple management strategies, and are time and resource intensive.

Figure 3.2: Factor 2 BoC



The management of BoC, particularly physically aggressive behaviour, in residential aged care is difficult and complex. Thus, it is reasonable to consider that a highly trained and highly supported workforce is required to manage people with dementia who exhibit physically aggressive behaviour. Therefore, the next chapter will focus on the social, political and educational aspects of the provision of care to people with dementia in the Australian aged care context.

Chapter 4

Dementia: Residential Aged Care Context

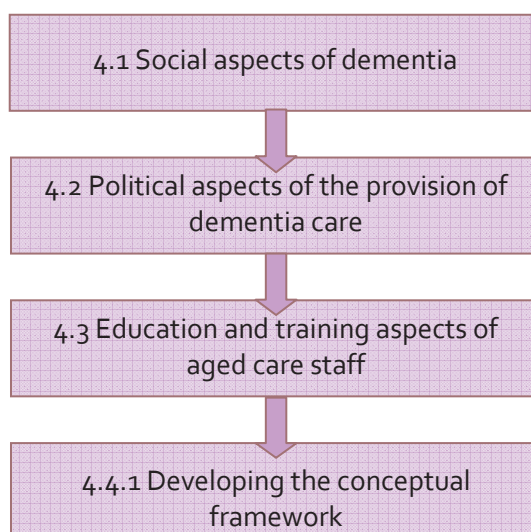
Chapter 2 highlighted the complexity of the manifestations of dementia, the aetiology, and the complex array of symptoms. Chapter 3 raised equally complex issues within the rubric of managing BoC, because BoC are problematic and cause significant concerns for staff in residential aged care. These two factors are represented diagrammatically in Figures 2.2 and 3.2

This chapter examines the context in which the care of people with dementia and the management of physically aggressive behaviour are considered. As the factors of dementia syndrome and the management of BoC are complex, so too is residential aged care.

This chapter explores the social, political and educational aspects of dementia care in the Australian residential aged sector. This will include: describing the complex funding arrangements and access to care in the aged care sector; discussing recruitment and retention issues; examining the educational preparation of nursing and care staff; and describing the current nursing model of care. While these factors are discussed on a national and international level, the Tasmanian aged care sector and particularly Facility X, is an example of this situation.

The structure of this chapter is outlined in Figure 4.1. The chapter commences with a discussion of the social aspects of dementia.

Figure 4.1: Chapter 4 Structure



4.1 Social Aspects of Dementia

The key social issue is the construction of dementia itself. This has a direct impact on the person with dementia and the management of their care. The personal impact is largely negative and relates to the reduction of social networks, decreased employment opportunities, and reduced independence through loss of driving licence. In terms of care management, the social perception of dementia contributes to reluctance on the part of doctors to disclose a diagnosis of dementia (discussed in Section 2.4.3 and 2.4.4) and negatively influences the recruitment of nurses into the aged care sector.

4.1.1 Impact of Dementia on the Person

Social perceptions of dementia are underpinned by understandings of ageing. Generally, old age and a state of dementia are synonymous, as the illness is perceived by many to be an inevitable part of ageing. For that reason, dementia is associated with old age, frailty, forgetfulness, hopelessness, loss, meaninglessness

and the suggestion that the person is ‘wholly lost to the illness; that all is left is a shell of a person who used to reside within it’ (Stoddart 1998:9).

People living with dementia do experience a progressive and significant loss of intellectual capacity and cognitive function. As a result, their social relationships are affected by behavioural changes and the loss of meaningful social interactions. These changes also affect the individual’s ability to work or function in ways formerly enjoyed. This can be problematic in a culture where social role, job or occupation defines who people are and where interpersonal interactions are important. The declining ability to communicate with others has been described by many authors as a loss of self (Small, Geldart, Gutman and Clarke Scott 1998). Kitwood and Bredin (1992), for example, describe dementia as ‘drifting towards the threshold of unbeing’. Stoddart (1998) describes the intellectual and social marginalisation of people with dementia as a loss of personhood. The concept of loss of self is also implicit in Kitwood’s (1997) ideas on personhood, which ‘challenge the moral vacuum that exist within the standard [biomedical] paradigm of dementia’ (Adams 1996). Kitwood associated personhood with ‘self-esteem, the place of the individual in a social group, the performance of given roles, and the integrity, continuity and stability of the sense of self’ (Perry and O’Connor 2002:55). Kitwood (1997) argues that the social marginalisation experienced by people with dementia results ‘from a system of caring which failed to make appropriate recognition of the importance of the person in dementia care’ (Stoddart 1998:9).

In agreement with Kitwood’s (1997) work, Stoddart (1998:11) suggests that the loss of personhood in dementia care can be overcome by caregivers taking the time to listen, to not be too eager to correct mistakes, to maintain roles

or to refrain from treating the person with dementia as irresponsible. To better understand the person with dementia, caregivers need to have an understanding of the range of dementias, because each manifests in a slightly different way (see Table 2.1).

4.1.2 Impact of Dementia on Care Management

One of the key issues around managing physically aggressive behaviour is the social aspects of dementia. This is because the community perception of dementia is negatively associated with desirability of wanting to work in the aged care sector. This negatively affects recruitment and retention of nursing and care staff to the sector.

Aged care nursing has been identified as an unattractive career choice, particularly for student nurses (Nay 1992; Stevens and Crouch 1992; Stevens and Crouch 1995; Stevens and Crouch 1998; Nay and Closs 1999). Caring for people with dementia is viewed as being particularly frightening by student nurses (Robinson and Cubit 2007). This negative view of aged care has significant ramifications for the recruitment and retention of nursing and care staff.

4.2 Political Aspects of the Provision of Dementia Care

This study is situated within the context of political debate surrounding the provision of adequate health care to older people. This emotive debate is deeply rooted in stereotypes of old age and dementia.

Residential aged care is designed for older people who are assessed as no longer able to live safely at home, usually because of illness or disability. While Australia's aged care system aims to provide quality care to those who need it (Australian Government Department of Health and Ageing 2007b), the notion of

maintaining personhood in dementia care is problematic given the complex organisational and funding structure of aged care. This complex way in which people access care and funding for that care in the aged care sector is discussed below.

4.2.1 Availability of Aged Care Beds

Access to residential aged care is determined in the first instance by the number of aged care beds available. Prior to the March 1996 Federal Election in Australia, there were 92 residential aged care beds for every 1,000 people aged 70 years and over. In 2001, the Government committed to provide 108 places for every 1,000 people with the Review of Pricing Arrangements in Residential Aged Care (Hogan 2004) recommending that this continue. On 30 June 2007, there were 170,071 residential aged care places, an increase of 3,780 compared with 30 June 2006 (AIHW 2007d). The current planning target for residential aged care provision is 88 places per 1,000 persons aged 70 years and over. This is substantially less than that recommended by Hogan (2004).

The shortage of aged care beds has implications for nursing and care staff working in the sector. This is because only the neediest people will gain a bed. Therefore, RACF resident acuity and subsequently care needs will increase.

4.2.2 Access to Care, Accreditation and Funding

The Australian Federal Government through the *Aged Care Act 1997* governs all aspects of the provision of residential care, flexible care and Community Aged Care Packages to older Australians, including the licensing of aged care beds as discussed above. The Act sets out matters relating to the planning of services, the

approval of service providers and care recipients, payment of subsidies and responsibilities of service providers.

Eligibility for a person to be admitted to an Australian Government accredited aged care home is determined by an Aged Care Assessment Team (ACAT) (Australian Government Department of Health and Ageing 2005). The multidisciplinary ACAT team's assessment of a person's care needs is comprehensive, including physical, medical, psychological and social factors. This assessment is used to facilitate access to appropriate care services (AIHW 2007c). In Tasmania, where this study was conducted, appropriate care for people with dementia is considered best provided in a Dementia Specific Unit (DSU). DSUs are facilities or sections of facilities designed to 'provide the necessary care [for people with dementia] in a safe environment' (Department of Health and Human Services 2001).

In Australia, residential aged care is predominantly provided by the non-Government sector, by religious, not-for-profit and private sector providers. All RACFs funded by the Australian Government must meet compulsory accreditation standards and show continuous improvement in the quality of care and services provided to residents. The standards cover areas such as management, care, lifestyle, quality and safety issues (Department of Health and Ageing 2008a). There are four standards and 44 outcomes that must be met under these standards (see Table 4.1).

Table 4.1: Residential Aged Care Accreditation Standards

Adapted from Department of Health and Ageing (2008a). 'Aged Care Australia Website.'
Retrieved 16 April 2008 from <http://www.agedcareaustralia.gov.au/>

Standard	Area covered
One	Access to a complaint system, the provision of care by skilled staff and the maintenance of goods and equipment within the home
Two	Health and personal care needs and ensures that medications are safely managed safely and correctly; continence issues are effectively managed, oral and dental health is maintained and that the best level of mobility is achieved for each resident
Three	Lifestyle including privacy, dignity and confidentiality, and the fostering of cultural and spiritual beliefs
Four	Focussed on ensuring residents live in a safe and comfortable environment that includes the minimisation of fire, security and emergency risks, and the implementation of an effective infection control program

Accreditation of a RACF is assessed by the Aged Care Standards and Accreditation Agency, which determines if a RACF meets the standards of quality care as required by the *Quality of Care Principles* (Australian Government 1997). Sanctions may be imposed by the Department of Health and Ageing on a RACF for not meeting the requirements of either the *Quality of Care Principles* or the *Aged Care Act 1997*.

Until March 2008, funding for residential aged care was determined by the funding tool known as the Resident Classification Scale (RCS), as identified in the Residential Care Manual. This was based on resident care needs that were 'identified as contributing the most to differences in the total cost of care' (Australian Government Department of Health and Ageing 2005:50-51). The

level of Australian Government subsidy for each resident was calculated by completing the 20 questions set out in the RCS, which covers areas such as the resident's: clinical needs; ability to complete various daily tasks; personal care needs; communication or sensory assistance; and need for social or emotional support (Australian Government Department of Health and Ageing 2005:57). However, the RCS failed to provide for the extra care requirements and support essential for residents who exhibited major behavioural problems associated with dementia (Kennedy 2004). This shortfall was often reflected in inadequate staffing levels.

Hence, in 2008 the RCS was replaced by a new tool: the Aged Care Funding Instrument (ACFI). This was a response to recommendations from the Review of Pricing Arrangements in Residential Aged Care (Hogan 2004) and the principal recommendation of the Resident Classification Scale (RCS) Review (Aged Care Evaluation and Management Advisors 2003). The ACFI was designed to:

- better match funding to the complex care needs of residents;
- reduce the documentation created by aged care providers to justify funding; and
- achieve higher levels of agreement between aged care staff and departmental review officers in review audits (Department of Health and Ageing 2008b).

The ACFI comprises twelve questions that are divided into three domains: activities of daily living, behaviour, and complex health care. These are considered with two categories of diagnosis giving a score to a resident's care

needs as low, medium or high. One of the most significant differences between the RCS and the ACFI is that for a resident to qualify for the highest level of the Behaviour Supplement (the funding allocated in relation to questions in the behaviour domain), a formal dementia diagnosis, provisional dementia diagnosis, psychiatric diagnosis or behavioural diagnosis is required. In the case of diagnoses covering depression, psychotic and neurotic disorders the diagnosis, provisional diagnosis or re-confirmation of the diagnosis must have been completed within the past twelve months (Department of Health and Ageing 2008b). Driven by a financial imperative, the ACFI will compel care providers to seek out a dementia diagnosis. The positive implications of this may result in residents undergoing comprehensive health assessments as recommended by Pond and Brodaty (2004), which in turn may result in funding allocation commensurate with the required level of care.

4.2.3 Workforce Issues in RACFs

While in Australia there are regulatory guidelines designed to ensure a sanction oriented quality system, there are real problems with the provision of care to older people in terms of creating and maintaining an appropriate workforce to deliver the care. In turn, this has direct implications for the way the current workforce is delivering care to people with dementia.

A number of key reports focussing on workforce issues in the aged care sector have been commissioned. These include: *Personal and possible: Achieving quality dementia care in residential aged care services* (Cecchin and Jarrad 2002); *National Review of Nursing Education* (Department of Education Science and Training 2002); *Australian Aged Care Nursing: A critical review of education, training, recruitment and retention in residential and community*

settings (Pearson, Nay, Koch, Ward, Andrews and Tucker 2002); the *Review of Pricing Arrangements in Residential Aged Care – final report* (Hogan 2004); and *The Care of Older Australians: A picture of the residential aged care workforce* (Richardson and Martin 2004). Common to all these reports is the identification of recruitment and retention of appropriately qualified nurses as a key concern in the aged care sector. The recruitment and retention of nursing staff in the residential care sector is considered the ‘most significant issue’ relating to the aged care workforce (Pearson, Nay et al. 2002: Section 3.3). Contributing factors to recruitment and retention have been identified as a lack of wage parity with the acute care sector, low staffing levels, inappropriate skill mix, low pay for Personal Care Assistants, excessive documentation, low status, lack of educational opportunities, and a lack of recognised career path (Cheek, Ballantyne, Jones, Roder-Allen and Kitto 2003; Stack 2003; Hogan 2004).

In 2002, the Commonwealth Department of Health and Ageing and the Alzheimer’s Association of Australia released a joint report into the quality of dementia care in residential aged care services entitled *Personal and Possible: achieving quality dementia care in residential aged care services* (Cecchin and Jarrad 2002). This report identified that staffing was a major issue, particularly including the availability of an appropriate number of qualified staff and general issues related to recruitment, retention and ongoing access to training. Nursing staff were perceived to be ‘stretched to capacity’ due to the increased acuity of residents and the requirements of the new aged care reforms that followed the introduction of the *Aged Care Act 1997* in October 1997. The introduction of the *Aged Care Act 1997* created a new set of funding arrangements for residential aged care facilities, including the introduction of accommodation charges, bonds

and income tested resident fees. In addition, the Act altered the requirements of service providers such that staffing numbers/resident ratios, staff qualifications or skills were left to the discretion of the provider (Angus and Nay 2003). This resulted in Registered Nurses leaving aged care because of the stress associated with being accountable for the work of unqualified workers and the care received by older people suffering (Nay and Closs 1999:172). Moreover, Cecchin and Jarrad (2002) found that a shortage of qualified staff reportedly made it difficult to employ Registered or Enrolled Nurses, and problems with recruitment were compounded by the high work demands of nurses in this sector. In contrast, a positive finding showed a high level of staff satisfaction and commitment to their work in the facilities involved in the study.

In a report commissioned by the Commonwealth Government Department of Health and Ageing to explore the recruitment and retention of nurses in residential aged care (Commonwealth of Australia 2002:55), stakeholder consultations, a survey of non-practicing Registered Nurses and a Literature Review were used to gather data. Analysis of these data was then used to recommend a number of strategies to redress the concerns of the aged care Registered Nurse workforce. The strategies suggested include: creating supportive work environments; increasing organisational support; generating greater acknowledgement of aged care nurses' knowledge and skills; improving rates of pay and staffing levels; improving the image of aged care; achieving the appropriate skills mix; minimising and clarifying documentation requirements; developing a national career progression framework for nurses and carers; and developing a national research program in aged care.

The National Review of Nursing Education (Department of Education Science and Training 2002) reiterated concerns relating to aged care nursing. These were: grave problems with recruitment and retention of sufficient numbers of qualified nurses in the workplace; associated problems with achieving an appropriate skill mix; and education and training for nurses and care assistants to meet the changing needs and models of care delivery for the elderly population.

The negative image of aged care (see Section 4.1) and the problems with recruitment and retention in the sector are long standing issues. A succession of studies has been undertaken addressing the issues around creating an appropriate aged care workforce culminating in the \$7.2 million major review of pricing (led by an economist), which was commissioned by the Commonwealth Government to examine the longer-term prospects of residential aged care services with particular respect to funding, performance improvement and financing (Hogan 2004). Among the many issues raised in his report, Hogan (2004) urged much greater efficiencies in aged care, pointing to problems with the viability of the sector. However, his comments on efficiency in the sector have since raised concerns about increasing commercial productivity at the cost of the length of time nurses spend with resident. This report once again identified the shortage of trained staff, which was undermining the capacity of the sector to provide appropriate quality care to older Australians, and recommended that the Government should refocus and expand its support for the education and training of aged care nurses and care workers.

The same year, the Richardson Report (2004:33-34) commissioned by the Commonwealth Department of Health and Ageing, presented findings of the first study on the aged care sector from which reliable estimates of the size and nature

of the workforce could be made. Data were obtained through a national survey of all Australian residential aged care facilities and their staff. This report showed that three quarters of nurses working in aged care surveyed felt they had insufficient time to complete the job they are employed to do satisfactorily and that 22 per cent felt pressured to work harder. These comments have direct consequences for the retention of staff as they reduce job satisfaction, which subsequently reduces staff members' desire to stay on in a position. Richardson reiterated the recruitment and retention concerns of the sector regarding the increasing difficulty of finding the number and quality of staff required to provide high quality of care to a growing number of older Australians (Richardson and Martin 2004).

Specific problems relating to recruitment and retention have been identified as: remuneration and lack of wage parity; increased workloads due to increasing acuity and dependency of residents; increased burden of paperwork related to documentation and external validation requirements by the Commonwealth Government Resident Classification Scale (RCS); the increasing number of unqualified workers; lack of career prospects; and poor image of nursing in aged care (Department of Education Science and Training 2002; Hogan 2004; Richardson and Martin 2004). Nurses' concerns about the increasing dependency of residents are well founded because more than a third of all residents of residential care receive care at RCS1, the highest category of care, for a period of time prior to their death or transfer to another facility (Andrews-Hall, Howe et al. 2007). These are significant findings in terms of this study because they provide a picture of the workforce issues facing the aged care sector, which affect the way nursing care is provided to people who live in RACFs.

As recently as 2005, a Senate Committee undertook a study that stated that little has improved in terms of the aged care workforce since 2002 (Senate Community Affairs Committee 2005). Later that same year dementia was identified as a national health priority with \$320.6 million of funding directed toward dementia care, research and support (Commonwealth Department of Health and Ageing 2005). The Senate Committee further highlighted the problems with recruitment and retention, and identified wage parity as a major barrier to the recruitment, retention and re-entry of nurses into the aged care sector (Senate Community Affairs Committee 2005:Section 2.9). The Australian Nursing Federation, which represents Australian nurses industrially, argued to the Senate Committee that the wage disparity has been ‘progressively widening as nurses in the private and public acute sectors have secured superior outcomes through enterprise bargaining’. Further, they argued that as at April 2004, ‘the wage disparity stood at 21.6 per cent. As a consequence, the Committee noted the aged care sector is struggling to be competitive both in relation to wages and career opportunities for staff’ (Senate Community Affairs Committee 2005: Section 2.9).

Recruitment and retention issues have resulted in a declining number of Registered Nurses employed in the residential aged care sector (AIHW 2003b) so that there is now a state-wide shortage of Registered Nurses in aged care (AIHW 2007a). At the same time, the number of Personal Care Assistants employed in RACFs has increased to 57 per cent of all staff, while Registered Nurses comprise 22 per cent and Enrolled Nurses thirteen per cent of the aged care workforce (Richardson and Martin 2004:19). In the period 2003-2007 there was an 18.6 per cent decrease in the number of nurses working in the aged care sector. Over the

same period there was an 18.9 percent increase in the numbers of Personal Care Assistants working in the aged care sector (Martin and King 2008). The implications of this change must mean that increasing amounts of resident care, including care for residents who exhibit physically aggressive behaviours, is now being provided by a relatively unskilled and unregulated workforce. This is supported by Hogan (2004) who reported that Personal Care Assistants now provide most of the hands on care to residents, such as washing, dressing, feeding and toileting.

In April 2005, the National Aged Care Workforce Strategy was released. The Strategy was developed by the Aged Care Workforce Committee following consultation with the aged care sector. The Strategy comprises seven objectives and seventeen strategies, and aims to provide a people management and development framework for a sustainable and viable aged care sector. The objectives include workforce profile, education, training and development, a responsive workforce and status and image (Department of Health and Ageing 2005).

The above discussion of contextual factors particular to the aged care sector highlights the complicated situation in which nurses and care staff provide care to people with dementia. This complicated situation is further confounded by current funding and accreditation requirements, which are without doubt difficult to negotiate for residents, their families and care providers. Moreover, the burden of the documentation requirements for funding and accreditation is one of a number of issues highlighted in several key reports commissioned into workforce issues in the aged care sector. Recruitment and retention are identified as ongoing

problems. These problems are in part due to concerns relating to the education and training of the aged care workforce.

In 2008, the problems were not resolved, highlighted by a statement from the Australian Nursing Federation (ANF 2008) claiming that aged care nurses are at breaking point due to impossible workloads, a lack of support, and chronically poor pay and conditions. No literature was found that addresses how these workforce issues impact on the sector's capacity to manage BoC.

4.3 Educational and Training Aspects of Aged Care Staff

The previous section indicated that recruitment and retention issues in the aged care sector are problematic for many reasons, including the negative stereotype of old age and aged care nursing, lack of wage parity and inadequate staffing and skill mix. Skill mix refers to the mix of staff working together to manage care. Aged care nursing staff comprises Registered Nurses, Enrolled Nurses, and Personal Care Assistants. The education and training of each of these groups is substantially different and will be discussed in the following section.

4.3.1 Registered Nurse Education

Registered Nurses (known as Division 1 nurses in Victoria) have had post-secondary education or training. Prior to the late 1980s, this training was delivered in the hospital setting (certificate in nursing). More recently, nurses obtain the tertiary qualification of a Bachelor of Nursing. Nurses must also be eligible to register with the Nursing and Midwifery Board in the relevant state/territory in which they wish to practice.

Since nursing education moved into the tertiary sector, a number of concerns have been raised. These concerns relate to the national nursing shortage

and the adequacy of undergraduate training places. To examine these concerns a *National Review of Nursing Education – Our Duty of Care* (Department of Education Science and Training 2002) was undertaken with the subsequent formation of the National Nursing and Nursing Education Taskforce (2004-2006). In the final report published from the Taskforce (National Nursing and Nursing Education Taskforce 2006), ‘Recommendation 16 Continuing clinical development of nurses: Aged care’ stated that Commonwealth, territory and state responsibilities and funding should provide support for ongoing clinical education of nursing staff. Further, in the *National Review of Nursing Education*, a number of strategies specifically targeted aged care:

Strategy 8: Higher education and training providers, in collaboration with aged care homes, further develop and market clinically relevant postgraduate programs in aged care.

Strategy 9: The aged care sector develop strategies to encourage nurses to undertake advanced studies in gerontological nursing; explicitly reward nurses who complete advanced studies; and develop roles to accommodate the specialised knowledge and skills of advanced gerontological nursing clinicians.

However, the concerns raised about the education, training and recruitment of aged care nurses in Australia has not yet been fully addressed (Robinson, Abbey and Abbey 2007). There continues to be debate about the adequacy of the current undergraduate curricula to prepare nurses for caring for older people. Indeed, reviews of Australian undergraduate nursing curricula suggest that education for students in aged care is often not adequate (Pearson, Nay, Koch, Ward, Andrews and Tucker 2001) and that there is an absence of identifiable education strategies to ensure student nurses were prepared and competent in the delivery of care to older people (Nay, Bennett, Garreffa, Price, Creber, Dunning, Jensz and Sawyer 2002).

While it is agreed that a core component of aged care nursing is necessary, a number of difficulties in implementing this have been identified. These difficulties include a lack of experienced, qualified specialist teachers in the aged care area, an under-developed knowledge base, a limited capacity to facilitate change and a widespread inferiority complex within the aged care discipline (Robinson, Abbey et al. 2007).

In Tasmania, where this study is situated the University of Tasmania offers the Bachelor of Nursing program. This three year program does include two units which specifically addresses the care of older people, a student initiated project in aged care in year one; and the Perspectives on Ageing unit in year two.

4.3.2 Enrolled Nurse Education

A rising proportion of nurses working in aged care are Enrolled Nurses (Division 2 nurses) (Martin and King 2008:18). These nurses complete a Diploma in Nursing or a Certificate IV in Nursing at a Technical and Further Education (TAFE) or Vocational Education and Training (VET) institution. Enrolled Nurses also must obtain registration with the relevant Nursing and Midwifery Board.

In Tasmania where this study was undertaken enrolled nurses (Division 2 nurses) complete an 18 months full-time Diploma in Nursing. One core unit is directly addressing working with older people. No unit appears to directly address dementia or behaviour management in the Diploma of Nursing⁹.

To maintain registration, Registered Nurses and Enrolled Nurses are required to demonstrate competence within their area of practice and to be accountable for their practice (ANMC 2006). Aged care nursing is a specialist

⁹ From Tasmanian Polytechnic <http://www.get-tasmania.edu.au/tafecourse.php?i=85> accessed on 6th November 2009.

area of nursing practice. Graduate Certificates and Graduate Diplomas in Gerontological Nursing are available, but not required for employment in the aged care sector.

4.3.3 Personal Care Assistant Training

The majority of ‘hands on’ care in RACFs is provided by Personal Care Assistants who currently comprise 60 per cent of the workforce (Richardson and Martin 2004). Personal Care Assistants are unlicensed workers who have a varied educational preparation. In Tasmania, for example, training for Personal Care Assistants at the time this study was undertaken was still optional. Personal Care Assistants may undertake a post-secondary Certificate III and IV offered through a number of VET providers including TAFE Tasmania. Certificate III requires the completion of two terms of full-time study (approximately 26 weeks). Nine compulsory units and four elective units are undertaken.¹⁰ Certificate IV requires that the person is already employed in the aged care sector, working a minimum of 20 hours per week. This course requires the completion of eleven compulsory units and three electives.¹¹

¹⁰ Compulsory units for Certificate III include: Provide support to an older person; Provide personal care; Orientation to aged care work; Support the older person to meet their emotional and psychosocial needs; Provide care support that is responsive to the specific nature of dementia; Communicate appropriately with clients and colleagues; Comply with information requirements of the aged care and community care sectors; Participate in safety procedures for direct care work; and Participate in the work environment. The elective units include: Assist in the provision of an appropriate environment; Support the older person to maintain their independence; Work effectively with culturally diverse clients and co-workers; Respond effectively to difficult or challenging behaviour; and Apply basic first aid. From TAFE Tasmania http://www.tafe.tas.edu.au/courses/COMMSERV/CHC30102Aged_N.htm#desc accessed 25 April 2008.

¹¹ Compulsory units for Certificate IV include: Maintain an Effective Work Environment; Maintain Organisation's Information Systems; Plan and Conduct Group Activities; Work Within a Legal and Ethical Framework; Deliver and Develop Client Services; Plan and Monitor Service Delivery Plans; Undertake Administrative Work; Provide Services to an Older Person with Complex Needs; Support the Older Person to Meet Their Emotional and Psychosocial Needs; Implement and Monitor OHS Policies and Procedures for a Workplace; and Utilise Specialist Communication Skills to Build Strong Relationships. From TAFE Tasmania

It is important to note that Certificate III and Certificate IV relate to the delivery of general care. Only the elective unit in Certificate III relates to behaviour management. No units appear to address behaviour management directly in Certificate IV. Thus, there appears to be very limited opportunity for Personal Care Assistants to obtain training in behaviour management. The management of physically aggressive behaviours as a symptom of dementia are yet to be explicitly added to VET training packages.

Peak nursing bodies recommend that Personal Care Assistants 'should have undertaken relevant education and training consistent with Level III of the Australian Qualifications Framework' (Royal College of Nursing Australia and the Australian Nursing Federation 2004). This does not specifically mandate behaviour management training and while national figures indicate that only 22 per cent of Personal Care Assistants currently employed in the sector hold a Certificate III¹² or above (Healy and Richardson 2003), this suggests that very few would have undergone any training at all. This coincides with the Australian Government DEST Job Guide 2008 (Department of Education Employment and Workplace Relations 2008), which states that personal care workers may be appointed without any formal qualifications. In expressing their concern about the absence of formal training of Personal Care Assistants, the peak nursing body, the Royal College of Nursing Australia, has stated that generally Personal Care Assistants have 'very little understanding of specific health needs of those in aged

http://www.tafe.tas.edu.au/courses/COMMSERV/CHC30102Aged_N.htm#desc accessed 25 April 2008.

¹² The Australian Qualifications Framework covers all of the nationally recognised qualifications in Australia, across the three sectors: schools, vocational education and training, and higher education. There are at present six competency-based qualifications identified for the vocational education and training sector: Certificate I; Certificate II; Certificate II; Certificate IV; Diploma; Advanced Diploma. From The Australian Qualifications Framework <http://www.aqf.edu.au/aqfqual.htm> accessed 12 June 2008.

care or of their responsibilities and role, and work well beyond their qualifications and scope of practice' (Royal College of Nursing Australia 2004:4). This indicates there is little consideration for caring for the specific needs of people with dementia, which are very complex due in part to the behavioural problems linked to the illness. Clearly the appropriateness of care being delivered by people with 'very little understanding' of the needs of people with dementia is problematic considering the complexity of the disease process outlined in Chapter 2.

4.3.4 Nursing in Residential Aged Care

It has been acknowledged that aged care staff hold an 'impressively high level of post-school qualifications' (Richardson and Martin 2004:27). For example, a large majority (87.7 per cent) of Personal Care Assistants have post-school qualifications. However, it is clear from a closer interrogation of the report that these qualifications are not aged care specific. Only 14.3 per cent of nurses have specific qualifications in aged care (Richardson and Martin 2004). Hsu and colleagues (Hsu, Moyle, Creedy and Venturato 2005) support this contention when they report that a little over 41 per cent of the aged care nurses (41.7 per cent) in Queensland held further nursing or health related qualifications beyond a hospital certificate. As a part of their review of nursing education, Pearson et al. (2002), referred to in the previous section, reported that a 'vast body of the literature has indicated the lack of aged care specific educational opportunities' (Pearson, Nay et al. 2002). This means that obtaining post-basic nursing qualifications in aged care in Australia is difficult with limited opportunity for training in behaviour management.

While conflicting views are noted on the role of the specialist nurse, there is widespread recognition that specialist education in aged care is essential (Illefe and Kennerson 1995; Stolley, Buckwater and Harper 1995; Joy, Carter and Smith 2000). However, another concern is that some consider that Registered Nurses are not essential in aged care (Nay and Closs 1999). Perhaps this lack of agreement is a disincentive for nurses to undertake additional training, which may explain why the actual number of gerontological nurse specialists is exceptionally low (Halpain, Harris, McClure and Jeste 1999; Nay and Closs 1999), and is likely to remain low as there continue to be ongoing barriers preventing the development of professional nursing in aged care (Hogan 2004; National Nursing & Nursing Education Taskforce 2006).

However, no literature was identified that addressed the issues around the capacity of Personal Care Assistants to manage people with dementia or BoC effectively in the residential aged care context. This is a stark omission as there is no understanding of the adequacy of 60 per cent of the workforce who have ‘very little understanding’ of the specific needs of those in aged care.

4.3.5 The Tasmanian Aged Care Sector

This study was undertaken in Tasmania, the island state of Australia. Tasmania has the second-highest proportion of people aged 65 years and over in Australia, with 15 per cent of its population aged over 65 years at June 30 2008. At the same time, Tasmania had the oldest median age of any state or territory (ABS 2008). The ageing of the population is reflected in the ageing of the nursing workforce with 28.4 per cent of Tasmanian nurses aged 51-60 years. Reflective of national nursing workforce issues, there is an overall shortage of general Registered

Nurses in Tasmania, as well as a shortage of all specialisations other than Critical Care and Emergency (DEEWR 2009).

The major source of supply of nurses in Tasmania is the School of Nursing & Midwifery at the University of Tasmania. Between 1997 and 2007, an average of 189 nurses graduated each year. A small percentage of the Tasmanian nursing workforce arrive from overseas and interstate (DEEWR 2009).

At the time this study was undertaken there were 88 Residential Aged Care Facilities in Tasmania. One of these facilities, Facility X was identified for inclusion in Phase 2 of this study. The selection of Facility X is discussed in section 5.8.2. The similarity between Facility X and aged care facilities in Tasmania and Nationally is discussed in Section 6.2.1.

4.4 Chapter Summary

This chapter discussed the social, political and educational aspects of dementia related to the provision of care to people with dementia who exhibit physically aggressive behaviours.

Social aspects of dementia are associated with negative community perceptions of ageing and cognitive decline. Cognitive decline decreases a person's ability to communicate effectively with others. This affects the person with dementia who is considered 'lost' to the illness. Negative stereotypes of ageing and dementia influence recruitment and retention of staff to work in the aged care sector.

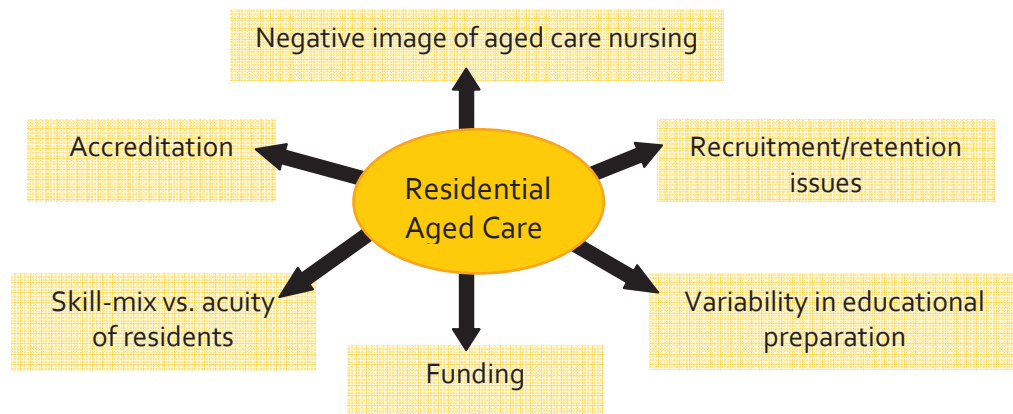
From a political perspective, the provision of aged care is the subject of considerable debate. This debate is focussed around the adequacy of health care provided to older people with dementia. Adequate health care provision is

compounded by the long-standing problems with recruitment and retention in the aged care sector.

In terms of education, it is apparent that aged care staff have limited opportunity for specialist training and educational opportunities. Behaviour management appears yet to be explicitly addressed in either nursing education or Personal Care Assistant training. This is problematic given the increasing acuity of residents, the increasing incidence of dementia and concomitant behavioural symptoms. Concerns must be raised as to how care is managed within a sector that has a blight of problems with recruitment and retention, which results in an inappropriate and inadequate skill mix such that complex dementia care is being largely provided by people with little or no training.

Chapter 4 described the National aged care context. The Tasmanian aged care context is similar, because all of the Tasmanian facilities involved employ Registered Nurses, Enrolled Nurses and Personal Care Assistants who deliver care to mixed-level care residents, including residents with dementia. The nursing and care staff are trained in the tertiary and TAFE system. In addition, the RACFs in Tasmania have similar recruitment and retention issues to those discussed in Chapter 4. These factors have been drawn together and presented in Figure 4.1. This Figure provides an overview of the context in which BoC are managed and highlights the decreasing number of Registered Nurses, the variability in educational preparation of nursing and care staff and the burden of meeting accreditation requirements to secure funding.

Figure 4.2: Factor 3 Residential Aged Care



4.4.1 Developing a Conceptual Framework

It is the aim of this concluding section of Chapter 4 to draw the three factors identified in Chapters 2, 3 and 4 together into a conceptual framework that represents the range of possible issues contributing to nursing and care staff's perception of BoC. The conceptual framework will guide the research project.

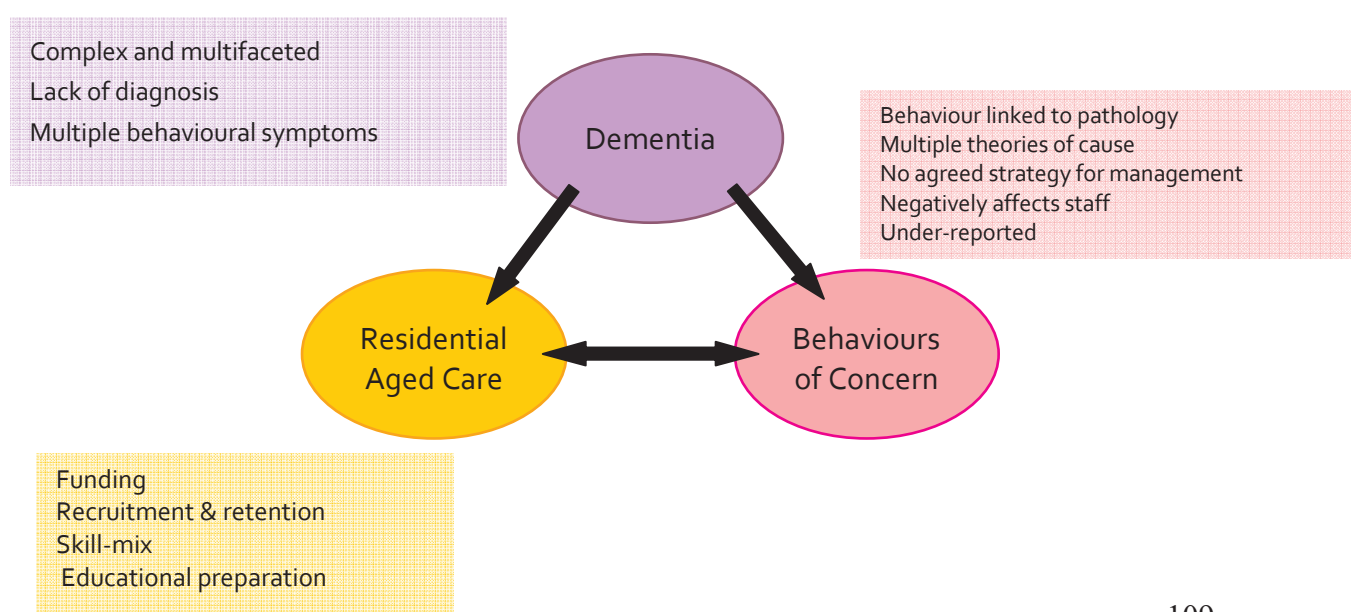
The literature on the dementia syndrome was presented in Chapter 2, and the many manifestations and complex pathologies that result in a myriad of behavioural symptoms were highlighted. Within this rubric of dementia, there is a range of terms used to describe the behaviours together with an array of classifications symptoms. The complexity of dementia and associated behaviours is matched by the complexity of diagnosis and treatment options, ranging from pharmacological to non-invasive environmental approaches.

Chapter 3 outlined that while many studies have been published, there is no agreed strategy to manage dementia behaviours effectively. The issue of diagnosis *per se* is also problematic. This is in part related to the complexity of the aetiology and manifestation, and in part to the lack of capacity of the

workforce to diagnose dementia, and an associated reluctance on the part of people with dementia to seek a diagnosis. The absence of diagnosis has implications in terms of the provision of nursing care because there are strong links between types of dementia, pathology and BoC.

Chapter 3 also highlighted the lack of clarity in the reporting of incidents of physically aggressive behaviour, and the ambiguity surrounding the impact of physically aggressive behaviour on nursing and care staff. Compounding these issues, Chapter 4 identified the variable education and inappropriate skill-mix in the residential aged care sector, and demonstrated that the appropriateness of this care is questionable. Capacity and an informed approach to manage BoC are thus compromised. Moreover, there is no real understanding under these circumstances of the incidence and impact of physically aggressive behaviour on staff, or the capacity of nurses and care staff to manage such behaviour. These factors are drawn together in Figure 4.2, which represents the conceptual framework for this study.

Figure 4.3: Conceptual Framework



This framework serves to demonstrate the interplay between the key factors identified in the Literature Review chapters. From this model, it is evident that the management of BoC is inextricably linked to the knowledge and understanding that nursing and care staff have of the complex dementia syndrome, and that nursing and care staff knowledge of dementia is variable and dependent upon education, training and access to ongoing educational opportunities. The model also depicts the relationship between a diagnosis of dementia, the ability of the aged care sector to plan and manage care, and the relationship between type of dementia and the manifestation of behavioural symptoms. Further, the under-reporting of BoC makes it difficult to obtain an accurate picture of the extent and impact these behaviours have on nursing and care staff. Together, the key factors identified in Figure 4 show how each intercept and impact on the capacity of the aged care sector to manage BoC appropriately. Therefore, a number of questions emerge from the Literature Reviews and this conceptual model. These questions are:

1. (a) What are staff perceptions of the frequency of BoC exhibited by residents with dementia in Tasmanian RACFs?
(b) How would nursing staff rank the BoC causing most disruption to the everyday running of facilities?
(c) How would nursing staff rank the BoC causing them most personal distress?
2. What is the incidence of physically aggressive behaviours among residents who have dementia living in a Tasmanian RACF?
3. What are the reporting practices of nurses and care staff in relation to physically aggressive behaviours?

4. How are physically aggressive behaviours by residents with dementia understood by Registered Nurses, Enrolled Nurses and Personal Care Assistants employed within a Tasmanian aged care facility?
5. How do these understandings affect the strategies utilised by staff to manage residents' physically aggressive behaviours?

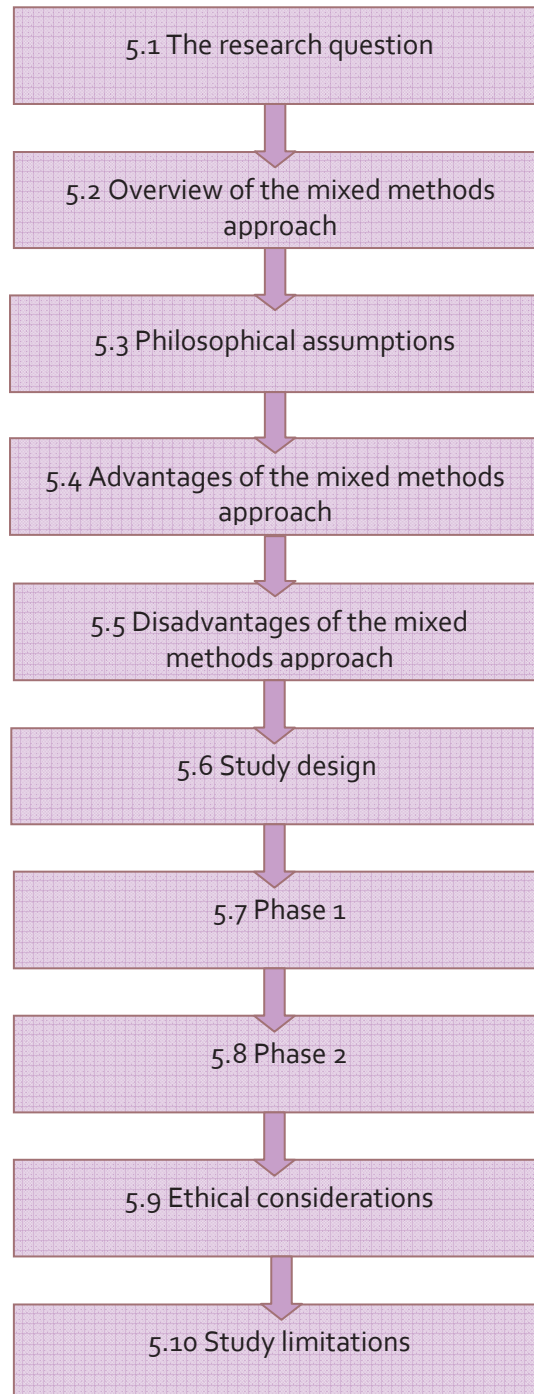
It is these questions and the conceptual framework that form the basis of this research and informs the choice of methodology.

Chapter 5

Methodology and Methods

Chapters 2, 3 and 4 provided the Literature Review and conceptual framework upon which this research is based. This chapter discusses the methodological principles of mixed methods research in relation to this study and explicates the development and implementation of the two-phase research design. The qualitative and quantitative methods of data collection and subsequent analysis are described in detail in this chapter. The ethical issues that arose during the process of data collection and analysis involving cognitively impaired participants are also discussed. The chapter structure is outlined in Figure 5.1.

Figure 5.1: Chapter 5 Structure



5.1 The Research Question

In the preceding chapters, a number of factors related to the provision of care to people with dementia in the residential aged care sector were clearly identified. Firstly, the incidence of the complex and multifaceted dementia syndrome is increasing generally in the population of Australia, and particularly in older people. Estimates of people with dementia in the aged care sector are hindered by a lack of diagnosis. Secondly, the management of behavioural problems associated with dementia has been indicated as a substantial concern for nursing and care staff. Concerns are raised surrounding the educational preparation of nursing and care staff in the aged care sector.

Finally, while a number of management strategies for BoC have been described, the actual extent of their effectiveness is still uncertain. In addition, a lack of clear supporting evidence has resulted in there being no commonly agreed strategy for managing the care and behaviours of people with dementia who are physically aggressive. From this review, a conceptual framework was developed (see Figure 4.3).

The review highlighted that BoC, particularly physically aggressive behaviour, do negatively affect nursing and care staff, but did not provide information on how this was the case. Therefore, the overall purpose of this research is to determine: ‘To what extent are physically aggressive behaviour exhibited by residents with dementia of concern to nursing and care staff in the Tasmanian residential aged care sector?’

The following questions are based upon this overall purpose, and emerged while developing the conceptual framework in Chapter 4.

1. (a) What are staff perceptions of the frequency of BoC exhibited by residents with dementia in Tasmanian RACFs?
(b) How would nursing staff rank the BoC causing most disruption to the everyday running of facilities?
(c) How would nursing staff rank the BoC causing them most personal distress?
2. What is the incidence of physically aggressive behaviours among residents who have dementia living in a Tasmanian RACF?
3. What are the reporting practices of nurses and care staff in relation to physically aggressive behaviours?
4. How are physically aggressive behaviours by residents with dementia understood by Registered Nurses, Enrolled Nurses and Personal Care Assistants employed within a Tasmanian aged care facility?
5. How do these understandings affect the strategies utilised by staff to manage residents' physically aggressive behaviours?

Although some of these questions have been explored and reported previously using single method studies, and several using multiple method studies, none were located that had been conducted combining data comprehensively through a planned mixed methods approach.

5.2 Overview of the Mixed Methods Approach

The use of the mixed methods research approach has been documented since the late 1950s (Campbell and Fiske (1959). During this period, researchers began using multiple methods to explore complex phenomena, and to discuss the benefits of triangulation. Notable historical developments in the mixed methods

approach include identifying rationales for combining data collection methods (Greene, Caracelli et al. 1989), and debate around the paradigmatic issues associated with combining qualitative and quantitative data, known as the incompatibility thesis.

Mixed methods studies allow for the inclusion of both qualitative and quantitative methods of data collection and/or analysis in a single study (Greene, Caracelli et al. 1989; Creswell 2003; Creswell and Plano Clark 2007). The use of mixed methods, as distinct from quantitative or qualitative approaches alone, is increasingly being used in social and behavioural sciences to study various social phenomenon (Tashakkori and Teddlie 2003; Johnson and Onwuegbuzie 2004; Creswell and Plano Clark 2007). In the social sciences particularly, mixed methods research is now considered a stand-alone, legitimate research design and is becoming more widely recognised with the release of publications dealing specifically with mixed methodologies (for example see Creswell 2003; Tashakkori and Teddlie 2003; Creswell and Plano Clark 2007; Morse and Niehaus 2009), and a peer-reviewed journal devoted entirely to mixed methods research.

However, within nursing research, the mixed methods approach is a relatively new methodology and is only now being recognised as an accepted approach. The growing acceptance of the mixed methods approach is important because issues arising from the provision of nursing care are usually multifaceted due to the complex factors that influence the health sector, but rooted within a single phenomenon (Morgan 1998:362). Mixed methods research is thus useful in nursing research to answer a range of questions such as the 'how much', as well

as the ‘what, how and why’ questions (Clark 2000:3) that arise in the health sector and require both qualitative and quantitative evidence to answer them.

Based on the overall purpose of the research and the questions identified from the literature, this study used a mixed methods approach. The conceptual framework used to guide the study was developed from the Literature Review (see Figure 4.2). In this study, the mixed methodological approach was used to combine a large scale and general assessment of the issue to gain an overall perspective, with a more detailed in-depth assessment of the issues provided by examining the situation from multiple perspectives within one particular RACF. When data are collected sequentially, as in the case of this project (quantitative first, then qualitative second), the quantitative phase provides the general results, which are then explained in the second phase with qualitative data. This is known as an explanatory mixed methods design (McMillan and Schumacher 2006).

5.3 Philosophical Assumptions

Mixed methods studies combine both qualitative and quantitative methods. However, because each of these methods is based on a particular paradigm, or worldview, combining methods is not without its problems.

Paradigms are a set of assumptions concerning reality (ontology), knowledge of that reality (epistemology) and the particular ways of knowing that reality (methodology). The quantitative paradigm is based on positivism in which the ontological position is that ‘there is only one truth, an objective reality that exists independent of human perception’ (Sale, Lohfeld and Brazil 2002:44). The post-positivist paradigm emerged following World War II (WWII) in response to criticisms made of positivism, in particular the belief in only one truth. The major

assumption of the post-positivist paradigm is that absolute truth can never be found, that the knower and known cannot be separated, and there is no shared, single reality. Reality can be approximated, but not fully apprehended (Guba and Lincoln 1994).

In contrast, qualitative research mostly follows the constructivist/interpretivist paradigms. The ontological position is that multiple realities exist and that these realities are constructed by individuals who experience the world from their own vantage point (Guba and Lincoln 1994).

Two positions have developed among mixed methods researchers: the pragmatist and the dialectical (Rocco, Bliss, Gallagher and Pérez-Prado 2003). Proponents of pragmatism make decisions based on what is required to ‘get the job done’. They reject the incompatibility thesis arguing that this approach offers the best opportunities for answering important and complex research questions (Rocco, Bliss et al. 2003; Johnson and Onwuegbuzie 2004).

In contrast, proponents of the dialectical position believe that multiple diverse perspectives are necessary to explain complex phenomenon in an increasingly pluralistic society. They argue that mixed methods researchers should intentionally use competing paradigms, because this dialectical approach gives rise to contradictory ideas and contested arguments, features of research that are to be honoured and that may not be reconciled (Greene and Caracelli, 1997, 2003).

The philosophical assumptions underpinning mixed methods research is therefore based upon how a researcher chooses to address the incompatibility thesis. This study will follow the guidance of Creswell and Plano Clark (2007), who suggest that paradigm choice should be informed by the study design. This is

an explanatory mixed methods study (see Section 5.6), with equal weighting given to both the quantitative and qualitative data. Therefore, it has been undertaken within both the post-positivist and constructivist paradigms. The underlying assumption is that ‘the research is stronger when it mixes research paradigms, because a fuller understanding of the human phenomena is gained’ (Rocco, Bliss et al. 2003:21). Within the constructivist framework, an ethnographic approach was undertaken in Phase 2 (see Section 5.8.1.1) to examine the ‘culturally derived and historically situated interpretations of the social life-world’ (Crotty 1998:67). Thus, Phase 2 was undertaken in an attempt to understand how and why resident behaviours were of concern to nursing and care staff in the aged care sector.

5.4 Advantages of the Mixed Methods Approach

Mixed methods studies can work for complementary purposes using both qualitative and quantitative methods to examine phenomena in a different way (Sale, Lohfeld et al. 2002:45). The advantages of a mixed methods research approach to this project included: the results from Phase 1 were used to inform and develop Phase 2; the ability to seek answers to a broad range of research questions; increasing the capacity of the project (Hansen 2006) to capture the best of both quantitative and qualitative approaches, bearing in mind the identified strengths and limitations of each approach (Kushman 1992; Tashakkori and Teddlie 2003); providing stronger evidence for a conclusion through convergence and corroboration of findings (Johnson and Onwuegbuzie 2004); and the ability to compare results from different methods for validation and triangulation (Morgan 1998:364).

5.5 Disadvantages of the Mixed Methods Approach

It is argued that, despite the growing popularity of the mixed methods approach, the implementation is not easy (Ivankova, Creswell and Stick 2006). Consequently, conducting a mixed methods research project does have a number of disadvantages, not the least of which is addressing the epistemological and ontological issues that arise from combining quantitative and qualitative research. For example, in Phase 1 the assumption was that the incidence of BoC could be measured, independently from other phenomena using a survey. In Phase 2, the interplay between the many key factors identified in the conceptual framework was acknowledged; and the many voices and perspectives of the participants acknowledged by utilising the ethnographic approach.

The disadvantages of mixed methods research as they relate to this study also include: the time consuming data collection methods; the need for expertise in both quantitative and qualitative methods; articulating the timing of data integration and the difficulty in logically constructing the final thesis.

5.6 Study Design

Studies to date had reported inconsistent estimates as to the incidence of physically aggressive behaviours. It was important to identify the incidence of this behaviour in the Tasmanian aged care sector. The incidence of physically aggressive behaviour was explored in this study in research questions 1, 2 and 3. Quantitative data were collected to obtain 'valid and objective descriptions of phenomena' (Taylor 2000:69), in this case the incidence of physically aggressive behaviour, using three data collection types: survey, structured observation and clinical audit.

There is ambiguity around the impact of physically aggressive behaviours on nursing and care staff, particularly regarding how and why these behaviours are of concern to staff. The impact of physically aggressive behaviours and nursing and care staffs' understanding and management of aggression was examined in this study in research questions 4 and 5. Qualitative methods of data collection that are used to elucidate 'human environments and human experiences' (Winchester 2000:3) were also undertaken. These methods included participant observation, interviews, group discussions and a second survey. This phase of the study was undertaken in one RACF to allow for rich data collection. This is because the missing element of studies to date was the intensity and multiple perspectives obtainable only from one setting where the complexities and contextual factors could be identified and incorporated into the data analysis.

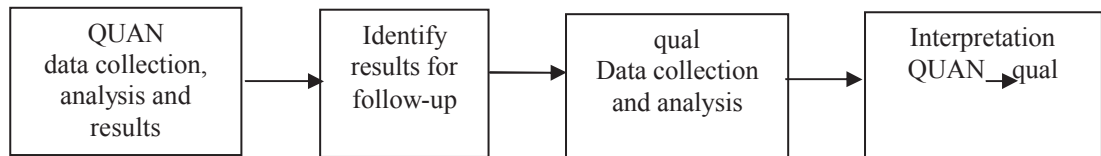
This study was designed in two phases to accommodate the two key foci: the incidence and the impact of physically aggressive behaviours. Acknowledging that 'different kinds of mixed methods designs make sense for different kinds of inquiry purposes and questions' (Greene 2008:13), the design of this project was based upon the types of questions to be answered. Therefore, the choice of data collection methods was an integral aspect of the design of this study. Determining incidence required quantitative data collection, while determining impact required the collection of qualitative data. The sequencing of data collection and integration were also determined by the research questions and the purpose of each data collected. This two-phase approach has a particular advantage in that the 'two paradigms are clearly separate' and this allows the researcher to 'present thoroughly the paradigm assumptions behind each phase' (Creswell 1994:177).

This study was based on a variation of the explanatory mixed method design (Creswell, Plano Clark, Gutmann and Hanson 2003; McMillan and Schumacher 2006). Specifically, this study followed the general outline indicated by Creswell and Plano Clark (2007:72) shown in Figure 5.2, which divides data collection into quantitative and qualitative phases. This ‘follow-up explanatory model’ design is used when specific quantitative findings require additional explanation. Using this model, additional data are collected from participants who can best explain the findings. Creswell and Plano Clark (2007:72) state that the primary emphasis is traditionally placed on the quantitative data. This design was suitable for the present study because one aim was to determine the frequency of physically aggressive behaviours among residents in Tasmanian RACFs, which required a quantitative data collection method, and then to explore these findings in more specific detail using both qualitative and quantitative data collection methods.

The notation system and visual diagrams developed by Morse (1991) were adopted because of their clarity. According to this system, the primary method is represented using capital letters (for example, QUAN) and the secondary method/s in lower case (for example, qual). Pluses (+) indicate methods that occur simultaneously and arrows (→) represent methods that occur in a sequence. An example of this diagrammatic representation is given in Figure 5.2. This Figure depicts a two phase study. The first quantitative phase is conducted and then key results are identified for follow up during a qualitative phase.

Figure 5.2: Follow-up Explanatory Model of Mixed Methods Design

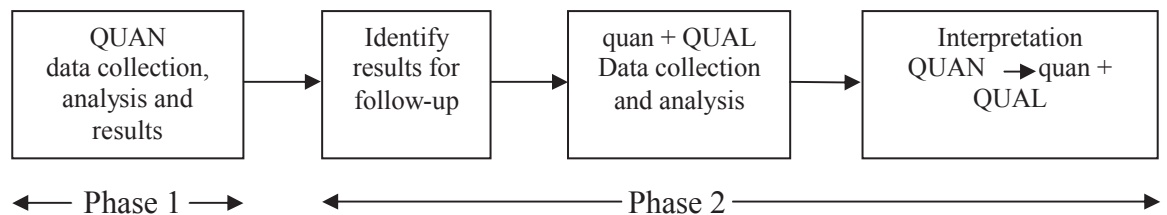
Adapted from Creswell, J. W. and V. L. Plano Clark (2007). *Designing and conducting mixed methods research*. Thousand Oaks, Sage.



For the specific purposes of this study, an additional variation was made to the model described by Creswell and Plano Clark (2001) to include some quantitative data in Phase 2. The modified design is represented in Figure 5.3.

Figure 5.3: The Mixed Methods Design of this Study

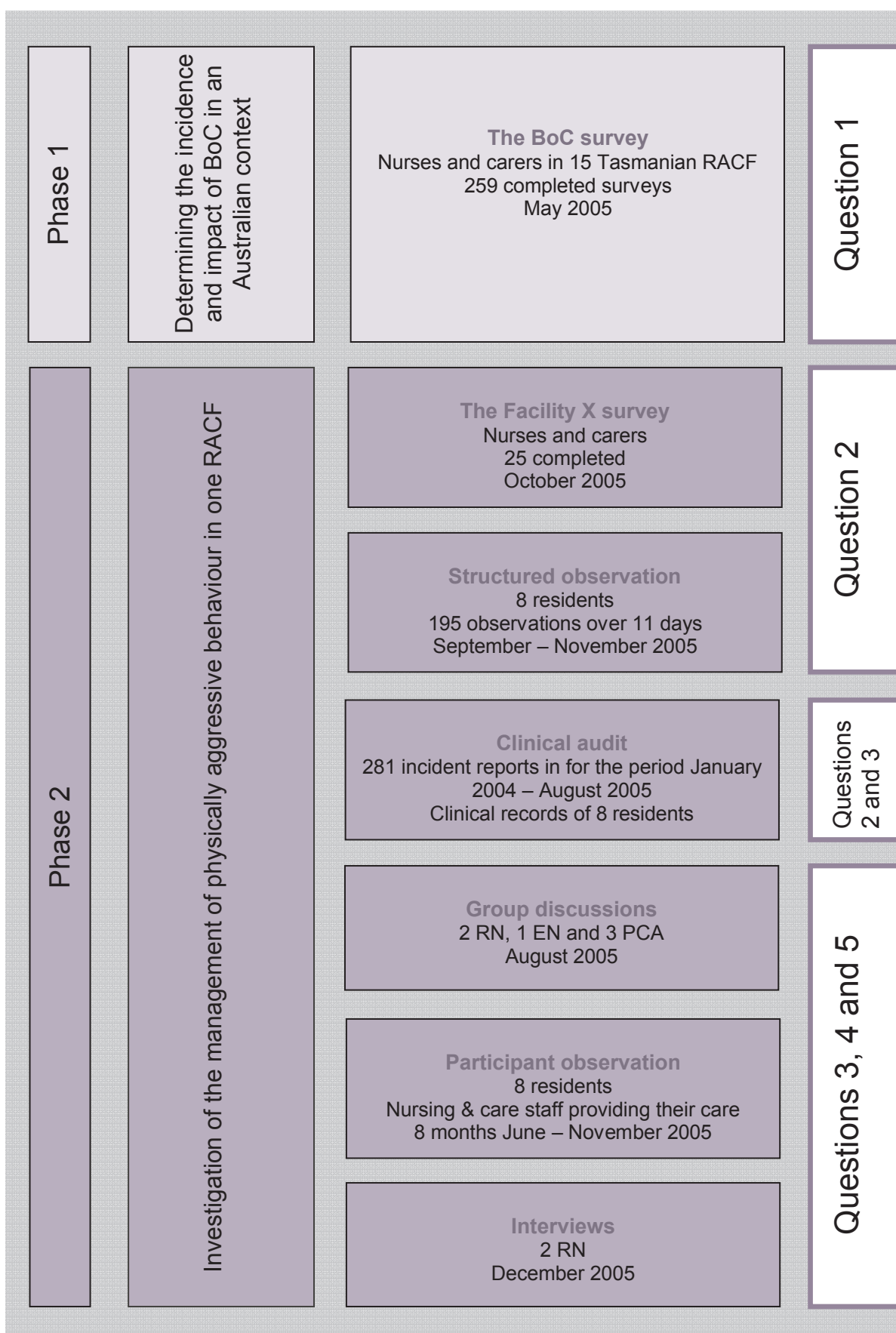
Adapted from Creswell, J. W. and V. L. Plano Clark (2007). *Designing and conducting mixed methods research*. Thousand Oaks, Sage.



The research project was therefore broken into two distinct phases: Phase 1 (primarily quantitative) and Phase 2 (primarily qualitative). The conceptual framework informed the choice of methods utilised in each Phase. In Phase 1, a macro-level survey was conducted across fifteen RACFs in Tasmania to identify the incidence of BoC, particularly physically aggressive behaviour, and to determine the extent to which physical aggression exhibited by residents was perceived as a concern by nursing and care staff working in the aged care sector. These data were analysed, and particular findings were identified that would be

explored further in the second phase. To seek answers to the questions arising from the Phase 1 data, both qualitative and quantitative data were collected in Phase 2. In Phase 2, six data collection instruments were used (survey, group discussion, interview, clinical audit and participant and structured observation) to examine the situation in a more detailed and specific way. The purpose was both to confirm the survey data collected in Phase 1, and to collect data on the lived experience of a range of staff working daily in the area including their understandings of dementia and physical aggression. A diagram of the project design is presented in Figure 5.4.

Figure 5.4: Diagram of Project Design



In the explanatory mixed method design, integration of the quantitative and qualitative results data occurs while discussing the outcomes of the whole study and drawing implications. According to Tashakkori and Teddlie (2003), this mixing of quantitative and qualitative methods results in a higher quality of inferences, and in so doing ‘underscores the elaborating purpose of the mixed methods explanatory design’ (Ivankova, Creswell et al. 2006:17).

5.7 Phase 1

Phase 1 was the quantitative phase of the project. The aim of this phase was to determine the incidence and impact of BoC in an Australian context and to clarify whether physical aggression was considered an issue by nursing and care staff. Based on the conceptual framework developed from the Literature Review, the method chosen was survey. Therefore, this phase involved developing, implementing and analysing data from a survey. The data were analysed against the conceptual framework to identify areas of interest.

5.7.1 Rationale

The rationale for this was that studies to date were inconsistent in their determination of frequency of physically aggressive behaviour; no studies had been located that identified which of the ten behavioural symptoms associated with dementia created the most problems for care staff, nor which of these behaviours caused the most personal distress to staff. The aim of Phase 1 was also to rank the BoC in order of their causing the greatest disruption to the facility, and the most personal distress to staff.

Only one previously published study had been located that reported on the occurrence of verbal and physical aggression directed against nurses in

Tasmanian RACFs. This Tasmanian study found that resident aggression was relatively common in aged care facilities (Farrell, Bobrowski and Bobrowski 2006). Almost 70 per cent of aged care/dementia care nurses in the study reported having experienced verbal abuse and nearly half (48.8 per cent of these nurses had reportedly experienced some form of physical abuse. The issue of physical abuse had been considered serious as 24 per cent of respondents (all nurses, not only those employed in aged care) reported having considered resigning because of workplace aggression. In addition, workplace abuse contributed to nurses' distress, undermined their productivity, increased their potential to make errors and negatively influenced their desire to stay in nursing.

No further studies were located that confirmed the findings nor identified more specific details of the nature of these aggressive behaviours and their links to the dementia diagnoses of the residents, or the degree to which this incidence constituted a 'problem' for the nursing staff. For example, there was no indication of which of the ten behaviours associated with dementia created the most problems for care staff, or whether or not there was a particular aggressive behaviour that caused the most personal distress to staff.

5.7.2 Sampling

Using convenience sampling, fifteen of the 88 RACFs in Tasmania were invited to participate in the BoC survey. These facilities were chosen because they were broadly representative of a demographic cross-section of resident socio-economic profiles, their close proximity and ease of access. This broad based large sample provided data from which to develop a contextual background for the study. Facilities included in this study were also representative of their operators: religious organisations (5), charitable organisations (2) and community-based or

other not-for-profit organisations (8), as well as representing the urban and rural mix of locations according to Australian norms (Hogan 2004).

5.7.3 Data Collection

The BoC survey was developed specifically for the purposes of this study. It was based on a review of the literature and the *ReBOC Reducing Behaviours of Concern guide* developed by the National Dementia Behaviour Advisory Service and Alzheimer's Australia (National Dementia Behaviour Advisory Service 2003) (see Appendix A for the BoC survey). The ReBOC guide described ten behaviours associated with the dementia that are shown in Table 3.1. Adopting these broad categories of behaviour was useful for the development of the survey conducted in Phase 1 because this document had been widely distributed among RACFs and therefore there was an assumption that nursing and care staff working in the aged care sector would be familiar with these descriptors.

The BoC survey was structured in two sections with a total of eight questions. The first was composed of five questions that sought standard demographic data from the RACF staff participants: their role in the facility, employment status, qualifications, age, and duration of employment in their current facility.

The second section of the survey was based on the ten BoC as described by the *ReBOC Reducing Behaviours of Concern guide*. The first of three questions asked participants to estimate how often each of the BoC were exhibited in their facility in their last working week (Never, Once/week, 2-6 times/week, Once/day or More than once/day). A second question asked participants to rank order the BoC in terms of the disruption they cause to the

running of the facility, and a third question asked respondents to rank order the BoC in terms of the personal distress they caused to themselves: where 1 represented the most disruptive or personally distressing BoC, and 10 the least disruptive or personally distressing behaviour. A space was provided for participants to list any other behaviour of concern or comments.

In 2005, the Phase 1 survey was delivered to the Director of Nursing (DON) in each facility. Following a briefing on the project, the DON elected to explain the project to staff. A secure and clearly labelled collection box was left at each facility for staff to return the completed survey anonymously and voluntarily. The researcher collected each box three weeks after delivery of the survey. Survey distribution processes varied by facility, but were in all cases conducted by a third party. Some facilities offered to include a copy of the survey and information sheet with staff pay slips thereby ensuring everyone actually received a copy, in other facilities the documents were physically handed to staff by the DON, and in others, they were deposited in handover areas with verbal information and encouragement to complete them provided by Nurse Unit Managers (NUMs).

In some facilities where the response was less than fifteen per cent the researcher contacted the DON, and sought permission to re-administer the survey. A small increase in response rate was achieved. Overall, 770 surveys were distributed; 730 surveys were sent to DONs and Nurse Educators, together with a further 40 surveys administered to students enrolled in the Bachelor of Nursing program. A total of 259 surveys were returned, representing a 34 per cent response rate. Some of the surveys were incomplete, but where questions could be

treated independently, the data were included. Consequently, not all of the totals equal 259.

Response rates varied across facilities with 33 per cent of care staff from the community and other not-for-profit entities responding; 29 per cent of care staff from religious organisations, and nineteen per cent of care staff from charitable organisations returning the survey.

Similar response rates were found between staff groups. Registered Nurses had a slightly higher response rate (35 per cent) compared to Enrolled Nurses and Personal Care Assistants (both 29 per cent). Student nurses on clinical placement had the highest return rate (78 per cent).

5.7.4 Data Analysis

The results from Phase 1 were statistically analysed to address the research question 1. Data were analysed using the Statistical Package for the Social Sciences™ (SPSS) version 10.0 (SPSS Inc., Chicago IL).

Raw data was initially entered into an Excel spreadsheet. Some manipulation of the data in Excel was required prior to uploading into SPSS. It was also necessary to create a code book. The code book was a list of variables that were measured by the survey, along with all defining and descriptive information. Once loaded into SPSS, the first step was to clean the data and examine the database for missing data. Where a survey was incomplete, the empty fields were coded as missing data and reported accordingly.

Descriptive statistics was used to describe and summarise data. The Chi Square test was used to examine associations among variables. A thematic analysis was conducted to examine the comments provided by respondents. Comments were read and re-read, to identify significant statements that were

categorised into themes in order to provide a clear summary of the information provided. All results from Phase 1 are provided in Chapter 6.

5.7.5 Validity, Generalisability and Reliability

In quantitative research, rigour is discussed in terms of validity, generalisability, reliability, and whether the study can be replicated. Validity may be defined as the ‘extent to which a measurement truly represents an intended characteristic’ and reliability is the ‘extent to which a measurement consistently represents an intended characteristic’ (Lutz 1983:12). Generalisability is how useful a set of findings are in explaining another, similar situation.

Some limitations to the survey should be noted. The sample size was over representative of Personal Care Assistants. It is not possible to generalise the findings because a convenience sample was used, and we do not know if the non-responders hold different views to those who completed the questionnaire. Nonetheless, the findings are mostly consistent with previous literature.

There were also limitations with the survey tool. Staff were asked to recall events of their last working week, and therefore perceptions of frequency, disruption and distress may have been altered by the passage of time, and indeed by events of their current workday. Reliability of the survey used has not been established. However, it could be argued that the validity of the tool has been proven to some extent by the responses of staff to the open-ended question, where the only other behaviour consistently mentioned was aggression directed at staff from residents’ family members.

5.8 Phase 2: Investigating the Impact and Management of Physically Aggressive Behaviour in One RACF

Phase 2 was primarily the qualitative phase of the project, and adopted an ethnographic approach. The aim of this phase was to explore the incidence of physically aggressive behaviour in considerably more detail and, at a more micro-level, to seek an explanation of the findings that arose from Phase 1.

5.8.1 Rationale

In Phase 1 of this study, analysis of the BoC survey data indicated that physically aggressive behaviours occurred infrequently but that they had a high impact on nursing and care staff. The rationale for exploring the impact of physically aggressive behaviour in Phase 2 was the ambiguity surrounding the impact of this behaviour on nursing and care staff. Studies to date had not clarified how and why these behaviours were of concern, although physically aggressive behaviours had been indirectly associated with increased staff stress and decreased job satisfaction.

The selection of data collection methods was informed by the conceptual framework developed from the Literature Reviews. The greatest weakness of the quantitative approach adopted in Phase 1 is that it decontextualises human behaviour by removing events from their real world setting, and situates the researcher external to the research. In Phase 2, qualitative methods were undertaken in which the researcher becomes the instrument of data collection, to generate rich, detailed description that provides a context for resident behaviour, and nursing and care staffs' understanding of that behaviour (Weinreich 2006). Thus, data were collected using an ethnographic approach in one RACF, Facility

X. Specifically, this data was collected to examine the incidence of aggressive behaviours, how these incidents were reported and to whom, how nursing and care staff understood and managed these behaviours, and how these understandings impact on the strategies utilised by nursing and care staff to manage physically aggressive behaviours.

5.8.1.1 The Ethnographic approach

Originating in anthropology, ethnography may be defined as a qualitative research approach that enables researchers to make sense of participants' behaviours by observing them in the context of their own environment (Roberts 2009). The basic element of ethnography is that it is the study of people's lives over a prolonged period through direct observation, interview and mute evidence collection (Hammersley and Atkinson 2005). In ethnographic research, the orientation of the researcher is described as etic or emic. Behaviours are studied from within the culture (etic) and from outside the culture (emic).

The assumptions that underpin ethnographic research are described as:

- A person's behaviour is inextricably linked with the meaning that the situation has for him/her;
- A person's understanding, and hence behaviour, changes as he/she interacts with others;
- Within a situation there will normally be different perspectives;
- A person's behaviour and beliefs can only be fully understood in the light of broader aspects of organisation or culture;
- The group or culture must be studied 'as it is' (Hilton 1987).

As a methodological approach, ethnography involves entering into the field, doing fieldwork, writing field notes, gathering data from direct observation of participants, interviews and analysing documents. Researchers attempt to find ‘key informants’ who can direct them to what or who they need to gather information on or from. Key informants are individuals who know the setting, like to talk and who understand the researcher’s purpose. In this study, the key informants were the Director of Nursing and the Nurse Unit Manager. These nurses were also the gatekeepers, who provided access to the facility, the staff and to the resident participants.

5.8.2 Sampling

Analysis of Phase 1 data was used to identify possible facilities in which to conduct Phase 2. Four facilities were identified: Facilities W, X, Y and Z. These facilities were all of similar size, and without a secure dementia unit. The target facility, Facility X was chosen for Phase 2 based on several research factors. The Phase 1 survey findings identified that there was no significant relationship between the frequency of physical aggression and the facility in which it occurred (see Section 6.2.2) and hence any one of the four facilities was appropriate to be selected.

Facility X staff demographics were similar to those of RACFs nationally (see Section 7.1.1). Pragmatic factors cemented the decision to choose Facility X over the others: the ease of access due to staff involvement in previous research and the undergraduate Bachelor of Nursing program; close proximity to the University; and willingness to participate in the research.

Facility X is a 56-bed section of a medium sized, mixed-level care, residential aged care facility in Tasmania. Facility X does not have a secure dementia unit.

The type of sampling commonly associated with ethnographic methods is purposive sampling. Purposive sampling strategies involve the deliberate selection of participants based on the information they can provide in relation to the phenomena under study (Rice and Ezzy 1999; Teddlie and Yu 2007). Two sub-groups were identified within the sample. The first group was members of the nursing and care staff working in one wing of the RACF, and included the key informants. Members of this group were invited to participate in the group discussions and interviews to determine their perceptions of the behaviours observed (Brink and Edgecombe 2003).

The second group comprised residents from the same wing of the RACF. The inclusion criteria for this sub-group was that the residents had dementia. This sub-group was selected to provide the greatest opportunity to observe physically aggressive behaviour. Each resident in the sub-group had been described by staff as physically aggressive and this had been documented in their nursing notes.

Recruitment and consent of staff and resident participants conformed to Human Research Ethics Committee (HREC) guidelines. However, because of some particular issues between the recruitment of these participants and the consent process (participant recruitment is discussed in more detail in Section 5.8) a third party recruitment method was employed, with eight resident participants being recruited through the DON and NUM of Facility X. Consent for the resident participants was sought from their Next of Kin (NOK).

5.8.3 Data Collection

Observation is the main method used in ethnographic research, and in Phase 2 of this study. Participant observation is an approach that provides an etic view of the culture being studied. Structured observation, group discussions, interviews and the clinical audit provided the emic perspective. These methods, when combined, provide a cultural portrait by pulling all of its parts together while representing the nuances and complexity of its systems (Creswell 1998). The purpose of this study, the questions identified, and the conceptual framework informed the selection of methods for Phase 2. In total, six data collection methods were used in Phase 2.

5.8.3.1 *The Facility X Survey*

The Facility X survey was a short, two-part survey (see Appendix B) consisting of sixteen questions divided into two sections. It was developed specifically for administration to nursing and care staff working in Facility X. The first section of the survey included ten questions seeking demographic data from the staff participants including: age, role in the facility, employment status, education, qualifications, experience in aged care, and duration of employment in their current facility.

The purpose of the second section of the Facility X survey was to ask more explicitly about ‘physical aggression’ through identifying the occurrence of more specific behaviours such as biting and hitting. The BoC survey (see Section 5.7) had asked about ‘physical aggression’ in broad terms. The term ‘physical aggression’ is open to interpretation by the respondents as to what behaviour they consider physically aggressive. The aim of the Facility X survey was then to

obtain more detailed information about the nature of resident aggressive behaviours by exploring staff perceptions of the frequency of BoC, and investigate staff rationale for completing Incident Reports following episodes of aggressive behaviour by residents. The Cohen Mansfield Agitation Inventory (Cohen-Mansfield, Marx et al. 1989) was drawn upon to develop this section.

The CMAI (see Appendix C) was developed to ‘assess the frequency of manifestation of agitated behaviours in elderly persons’ in the nursing home (Cohen-Mansfield 1991:2). Agitation is often a precursor to aggression (see Section 2.2.2). The CMAI provided very detailed descriptions of 29 agitated behaviours. For the purpose of this study, it was considered that many of these agitated behaviours described in the CMAI were actually descriptions of physically or verbally aggressive behaviour. These behavioural descriptions were used to develop a more specific set of descriptions for physically and verbally aggressive behaviours for the Facility X survey compared to the more broad descriptions of physically and verbally aggressive behaviour used in the BoC survey.

Thus, 20 of the 29 agitated behaviours described in the CMAI were included in the Facility X survey: scratching; kicking; punching; pinching; biting; combativeness (eager or disposed to fight, belligerent); grabbing; shoving; spitting on/towards you; stabbing (with pen, knife, fork); slapping; pulling hair; throwing objects at you; and resistance to personal care (uncooperative with showering, dressing, toileting). Verbal aggression included: insults/unkind speech; threatening language; offensive speech (swearing or use of obscenities); negative criticism; verbal accusations (accusation of theft of belongings/money); and screaming/yelling.

The Facility X survey asked participants to estimate how often each of the BoC were exhibited in their facility in their last working week (Never, Once/week, 2-6 times/week, Once/day or More than once/day).

Space was provided for respondents to list any other behaviour/s that they felt should be included. The survey also included four items related to reporting and documenting resident behaviours. The final item was an open-ended question that asked participants 'what might have helped you to prevent or manage this situation?'

Surveys were hand delivered to participants within the facility who were also involved in group discussions (see Section 5.8.3.5). The NUM distributed surveys to and collected them from those staff who were not involved further in the group discussion sessions. The completed surveys were stapled shut by the participants and returned to the NUM who put them in a sealed envelope and arranged for them to be posted back to the University. Of the 95 care staff who received a survey, 25 returned completed surveys, giving a 25 per cent response rate. This comparatively low response rate may be explained by a number of factors, including: the recent completion of the Phase 1 BoC survey; 'research fatigue' due to the facility's previous active involvement in a large research study (Robinson, Cubit et al. 2002; Robinson, Cubit et al. 2004a; Robinson, Cubit et al. 2004b; Robinson and Cubit 2005b; Robinson, Venter et al. 2005; Robinson and Cubit 2007; Robinson, Andrews-Hall, Cubit, Fassett, Venter, Menzies and Jongeling 2008); the University's Nursing Honours and PhD programs; and providing clinical placements for first and second year undergraduate nursing students. While the response rate is low in relation to some studies, no pattern in the responses was identified indicating there was no systematic bias. Moreover,

confidence in the results can be reasonably high as there was agreement between the data from the BoC survey, structured observation and participant observation.

The demographic profile of the staff completing the Facility X survey was similar to that of those completing the BoC survey. Therefore, the likelihood of this being a representative sample of Tasmanian aged care staff is high. Similarly, the demographic profile of the nursing staff employed in Facility X is comparable to that of facilities participating in the three stage *Building Connections in Aged Care* project also undertaken in Tasmania (Robinson, Cubit, Venter and Fassett 2004; Robinson, Cubit, Venter, Fassett, Mather and Andrews 2004; Robinson, Venter, Andrews, Cubit, Menzies, Jongeling, Fassett and Mather 2005), again increasing the likelihood of this being a representative sample.

5.8.3.2 Structured Observation

The purpose of the structured observation was to systematically observe, define and record the behaviour of residential aged care residents with dementia. This was undertaken by using a modified form of the Agitated Behaviour Mapping Instrument (ABMI) (see Appendix D). Permission to use this tool was received in writing from the author (see Appendix E).

The Agitation Behaviour Mapping Instrument (ABMI) (Cohen-Mansfield, Marx and Rosenthal 1989) is a non-obtrusive tool developed specifically for use in residential aged care. It was designed for the observation of behaviours of residents as they occur in their natural setting for the purpose of research and assessment in the residential aged care setting.

This tool was selected for a number of pragmatic reasons. Firstly, the ABMI continues to be successfully used by the author (Cohen-Mansfield 1996; Cohen-Mansfield, Libin and Marx 2007) and other researchers (van Diepen,

Baillon et al. 2002; Kovach, Taneli, Dohearty, Matovina Schlidt, Cashin and Silva-Smith 2004). Secondly, the tool and permission to use the tool were readily accessible. Thirdly, and most importantly, the ABMI measured the variables of focus in this study. Specifically, these variables were: the observed behaviour itself; the location of the resident; the number of staff present; the number of other residents present; the activity being undertaken by the resident; the environment; the body position of the resident; and their reaction to the staff and/or residents in their vicinity. Collecting this data directly contributed to the capacity to answer the research questions concerned with how the environment contributes to the manifestation and management of BoC.

The tool was modified slightly to reflect more adequately the data requirements of this project. Firstly, the section on sleep was removed for practical reasons (i.e. the difficulty of a single researcher spending enough time over night to have a usable number of observations). Secondly, a section on restraint was added in response to the literature (see Section 3.3.1). Thirdly, following visits to several RACFs and speaking with a number of nurses working in the sector, it appeared that the use of restraints might be a contributing factor in the manifestation of physically aggressive behaviours, or that it might be a means used by staff to manage physically aggressive residents, so this issue needed to be included directly.

After trialling the instrument over a two-day period, the data collection sheet was simplified to make it more user-friendly, less conspicuous and easier for data entry (see Appendix F). The modifications also reflected the types of residents to be observed, their environment and those providing their care, for example references to ethnic origin of carer were removed. Unlike the facility in

which the instrument was originally developed, which was characterised by an ethnically diverse nursing and care staff, all care staff in this study were relatively homogenous (i.e. Caucasian and English speaking).

Agitated behaviours, including physical aggression, are known to be exhibited by residents most frequently during the morning nursing shift. This is due in part to activities involving resident hygiene care (Ryden, Bossenmaier et al. 1991) and the sundowning phenomenon (Cohen-Mansfield, Watson et al. 1989; Volicer, Harper et al. 2001). This information required the scheduling of observation times accordingly.

In the structured observation, a total of 195 three-minute observations using the ABMI were made over a period of eleven days between 15 September and 16 November 2005.

5.8.3.3 Clinical Audit

The clinical audit was conducted on incident reports and the clinical records of each of the eight resident participants. Incident reports documented in the RACF pertaining to the eight resident participants were reviewed to obtain quantitative data on the number of aggressive incidents reported, and details of the resident and staff member/s involved, the time and location of the incident, record of any injury, the precautions/strategies used to prevent and/or manage the incident, together with the outcomes of management strategies.

The clinical records were also reviewed for the residents' age, date of admission to the facility, brief medical history, a diagnosis and/or documentation of dementia, and to see what and how often Registered Nurses documented behaviours, and how these behaviours were managed.

Permission was sought from the resident's NOK during the consent process to access these documents. Although advice had been received that clinical records held within the facility were 'the property' of that organisation, which meant the DON could give permission for access, the ethics guidelines stipulated that permission was also sought from the General Practitioners (GPs) who were responsible for the care of each resident. A detailed letter was sent to each GP, outlining the project and the need to access the clinical notes of the eight participating residents (see Appendix I). Responses were requested in writing, which were received from all but one GP. This GP gave verbal permission.

All incident reports in the facility were reviewed for the period January 2004 to August 2005: a total of 281. Of those, four incident reports involved participants from this study.

5.8.3.4 Participant Observation

Participant observation is considered the 'signature of ethnography' (Brink and Edgecombe 2003). This method is characterised by the researcher becoming immersed in the daily lives and activities of the people being studied in order to better understand the insider, or emic experience. Participant observation enabled me as a researcher to examine how the nursing and care staff understood resident behaviours, and to see, first hand the impact of physically aggressive behaviours on those staff. To achieve this I tried to become part of the culture being studied (Roberts 2009). Becoming part of the culture was important for a number of reasons. Firstly, although I had not previously worked in the sector, I was aware of the negative image and high workload of Registered Nurses in the aged care sector because of earlier research I had been involved in during 2002 to 2004. Therefore, it was important to experience 'being' a Registered Nurse in the aged

care context so I could understand the insiders or ‘emic’ perspective. Secondly, it was crucial that I get to know the nurses, carers, and the residents. Getting to know staff and residents was an important way in which to understand the uniqueness of the aged care context. Thus, participant observation conducted in this study provided:

A process whereby the researcher establishes and sustains a many-sided and situationally appropriate relationship with individuals and groups in their natural setting for the purpose of developing an understanding of those individuals and groups (Lofland, Snow, Anderson and Lofland 2006:17).

Developing an appropriate relationship with the nursing and care staff was important in this study because it provided a unique insight into the context, which assisted in exploring the pivotal relationship between the data and the unique context of residential aged care, which previous studies had failed to acknowledge.

Access to the unit was obtained through meeting and discussing the project with the CEO, the DON and the NUM of the target RACF. All three voiced their support for a researcher working within their facility, particularly as the project had a focus on BoC, which they identified as problematic. I arranged to visit the facility on a number of occasions over a two-week period to familiarise myself with the layout of the facility, routines, staff and residents. I consider this to be a period during which I was what may be termed a ‘complete observer’ (Lofland, Snow et al. 2006). That is, I was uninvolved and detached, there for developing a general picture of the setting, and to record interactions and behaviours from a distance.

To enable me to familiarise myself with the facility further, and to undertake the role of a ‘participant observer’, I arranged to work as a Registered

Nurse, working one or two shifts each week for approximately four months. I adopted a role of 'learner', hoping that my lack of knowledge about aged care nursing practices would be an advantage, enabling me to see the 'taken for granted' practices, have the opportunity to be 'taught' by the nursing and care staff, and to not be perceived as a threat by the nurses I was working with (Lofland, Snow et al. 2006). During this time, I administered medications, completed assessments and the documentations required by the facility and attended to other procedures as the situation arose, including management of residents' behaviours. At the end of each shift, or as quickly as practicable, I wrote in a personal journal describing and reflecting on events that I had observed and participated in during the shift. Where possible, I focussed my observations on the activities, behaviours and interactions of the resident participants both between themselves, other residents and with the nursing and care staff. Each shift, I also engaged in informal conversations with the Enrolled Nurses and Personal Care Assistants working with me. We discussed aspects of care related to the behaviour management of the resident participants. Excerpts of these conversations were also recorded in the journal, and the contents used as a data source and the starting point for developing questions for the group discussions and interviews.

However, being part of the culture and developing relationships with the participants, inevitably affects the phenomenon being observed. It is important to acknowledge this affect, and to also recognise that the personal beliefs, biases and individual tastes of the researcher will control to some extent how the culture is perceived (Fetterman 1989). The researcher's presence in the setting must invariably affect the phenomenon being observed. Therefore, in ethnographic

research it is important to acknowledge the impact of the researcher on the setting, the data collection and the analysis of that data. That is, reflexivity and a critical self-awareness are required of the researcher (Hansen 2006).

To facilitate my capacity for reflexivity in this activity I maintained regular contact with my supervisors and colleagues from the university and aged care sector. Loftland et al. (2006:66) claim that this strategy is helpful to unpack and understand how my personal beliefs may have impacted on the data. To be reflexive in this way requires insightfulness, receptivity and self-understanding (Baker 1994).

In adopting this reflexive position I recognised that my education and previous nursing roles may have situated me in a hierarchical position which may have instilled in the nurses and carers a sense of power imbalance.

To overcome this possible power imbalance I focussed on continually maintaining my role as 'learner' in the aged care setting, frequently asking questions and seeking assistance from the nursing and care staff that I was working with. Further, I sought to reduce the power imbalance by promoting ways to identify with and avoid deception of the nursing and care staff. Where possible I accepted 'extra' shifts when I knew they had staffing shortages, attended unit meetings, went on tea breaks with the PCAs and empathised with the RNs as they lamented their workload. Like Bland (2002), I worked at becoming 'friend' as well as 'researcher' to minimise the power imbalance.

It is important to note, given the frailty and cognitive decline of the resident participants, that although being a 'learner' as a participant observer I was clearly aware of my legal and ethical responsibilities as a Registered Nurse.

Had the instance of staff or resident safety arisen I would have acted firstly as a RN; and reflected later as a researcher.

5.8.3.5 Group Discussions

Two group discussions were held due to constraints imposed by staff rosters: one with a group of Registered Nurses and Enrolled Nurses and the other with Personal Care Assistants. Nurses and carers working in aged care might be described as a disempowered group and may be reluctant to voice opinion or criticism about their workplace. The intent of the group discussions was therefore to provide a safe environment in which the nurses and care staff could be encouraged to reflect and discuss their experiences of caring for people with dementia. In this project, a safe environment was made possible through working as a Registered Nurse alongside each of the participants (as part of the participant observation), to develop their trust and acceptance. Norman and Parker (1990:1042) note the importance of ‘the interviewer being well known and accepted by the participants if rich and valid information is to emerge’. Being well known and accepted as a Registered Nurse by the participants facilitated the sharing of stories of caring for the residents familiar to the entire group.

To recruit participants, a poster was created and displayed in the nurses’ station outlining the purpose of the group discussions. Participant recruitment was difficult for several reasons. Firstly, and most importantly, many of the staff did not have free time available during their workday to attend the group discussion. Secondly, due to the high workload of those working in aged care, it was often impossible to cover their shift so they could leave the floor. Thirdly, this particular facility may have been over-exposed to research by the University due to the staff mix closely resembling aged care workforce demographics nationally,

the facility's close proximity to the University, and the ease of access due to the DON's active and ongoing involvement with the University (see Section 5.7). Fourthly, while many of the nursing and care staff had previously participated in research projects with the University, others were disinterested and did not contribute.

Eventually, six participants were recruited. The participants included two Registered Nurses, one Enrolled Nurse and three Personal Care Assistants. Demographics of the participants are presented in Table 5.1. Due to staff rosters that prevented all participants meeting together, two group discussions were held rather than one. The group discussions occurred in the staff education room. Afternoon tea was provided.

Table 5.1: Group Discussion Participants

Participant	Role	Gender	Age	Qualification	Time in aged care
1	RN	F	41-50	Diploma (area unspecified)	1-5 years
2	RN	M	21-30	Bachelor of Nursing	3-12 months
3	EN	F	41-50	Medication Endorsed	>10 years
4	PCA	F	21-30	None	1-5 years
5	PCA	F	31-40	Certificate III in Aged Care	>10 years
6	PCA	M	51-60	Certificate III in Aged Care	1-5 years

Each group discussion was held at a time and place convenient to those participating. The sessions lasted approximately one hour and were audio-taped and transcribed. The participants' real names were not used in the transcripts. The final transcripts were returned to participants for data verification (Patton 1990; Creswell 1998). Participants were advised that anonymity and confidentiality could be assured for all those participating. However, it was the responsibility of the participants themselves not to disclose any identifiable information shared during the meeting by their colleagues. All those attending were reminded of their right to withdraw from the group at any point without penalty, and the right not to respond to any question.

Participants were prompted to discuss what they considered physically aggressive behaviour, to describe their experiences of providing care for people who have dementia, particularly those who are physically aggressive, and to explicate how care for those residents is managed in Facility X.

5.8.3.6 Interviews

Semi-structured interviews were conducted with two Registered Nurses, the DON and the NUM. The intent of the interviews was to identify and examine the perspectives of senior nursing management as I anticipated that it would be different from that of the nurses at the coal-face. This was because the role of the DON and NUM was to control staff numbers and staff mix on any given shift; to manage the Facility X budget; and to be directly involved in the processing of applications for new residents. I considered that if they were invited to participate in the group discussions their hierarchical position would potentially inhibit the contributions of the other nursing and care staff.

Both nurses were verbally approached to participate in the interviews because of their expertise in aged care and dementia, and as both nurses were eager to discuss how they were involved in providing care for people with dementia they consented to participate in the study. Informed consent was obtained as discussed in Section 5.9.

Semi-structured interviews were conducted with these nurses on separate occasions at a time and place of their choosing. Each interview lasted approximately one hour and was audio-taped and transcribed verbatim with the participant's permission. Transcribing provided an opportunity to engage more fully with the data through listening and re-listening to the interview while typing the transcript. A professionally transcribed tape had numerous gaps, which also required considerable re-listening to ensure the correct transcription had been made, and to ensure that I had understood the discussion. As with the transcripts from the group discussions, the interview transcripts were returned to each participant to verify the content (Gribich 1999).

As I had worked in the facility as a Registered Nurse conducting participant observation, and as a Research Assistant on a different project undertaken in this facility, I was known to the nurses who participated in the interviews. Similar to the trust required to conduct the group discussions, building an intimacy with the participants through shared work experiences provided an environment that allowed them to talk frankly and openly about the subject matter, which resulted in a more honest rather than scripted response,

Semi-structured interviews follow an open format. Open-ended questions were asked of the participants focussing on management strategies for residents with dementia, discussions of the behavioural histories of the eight resident

participants and the role of staff education. Probing questions were used to elicit information from the Registered Nurses on the subject of how they managed and delivered care to people with dementia who were perceived to be aggressive (Gribich 1999). Questions asked how staff education and training contributed to the management of behaviours, what environmental approaches were used to reduce agitation and the subsequent manifestation of aggression, the role of pharmacological approaches to managing BoC, and what was the rationale behind Facility X's policy of risk.

The seven data collection methods are presented together in Table 5.2. This table depicts the two phases of the study, the data collection methods and instruments, participants, sample size, and the purpose of the data collected. The necessity of each data collection method is demonstrated by four of the research questions requiring more than one method of data collection to fully answer it.

Table 5.2: Data Collection Methods

Study phase	Research question	Method type	Instrument	Instrument purpose	Participants	Sample size	Data collected	Data analysis	Data collection date
Phase 1	RQ1	QUAN	BOC survey (Appendix A)	State-wide survey to establish broad incidence and impact of BoC in aged care facility	Nurses (RN, EN) & carers (PCA) from 15 Tasmanian RACF	N=259 RACF staff	Likert responses to survey questions focussing on incidence and impact of range of BoC including physical aggression	Descriptive statistics; Chi square	May 2005
Phase 2	RQ2	QUAN	Facility X survey (Appendix B)	Single facility survey to establish facility incidence and to compare data with state-wide survey results (BOC Survey)	Nurses (RN, EN) & carers (PCA) from 1 Tasmanian RACF (Facility X)	N=25 Facility X staff	Likert responses to survey questions focussing on incidence of physically aggressive behaviours	Descriptive statistics	Oct 2005
Phase 2	RQ2	QUAN	Structured observation adapted from ABMI (Appendix F)	Observe resident behaviour directly to document nature and impact of aggressive behaviour over a 24 hours time frame	Researcher observations	N=8 Facility X residents	Frequency, location, and environmental data on residents behaviours	Descriptive statistics	Sep-Nov 2005
Phase 2	RQ2 & RQ3	QUAN + QUAL	Clinical audit	Examination of incident reports to review formal reporting of behavioural incidents	Researcher	N= 281 incident reports (Jan 2004 - Aug 2005) from clinical records of 8 Facility X residents	Frequency data on number and type of incidents reported	Summary, descriptive statistics	August 2005
Phase 2	RQ3, RQ4, RQ5	QUAL	Group discussion	Investigate staff responses to resident behaviour	Researcher	N=6 staff (RN =2, EN= 1, PCA = 3)	Detailed information from staff about their experiences and the impact of caring for people with dementia who exhibit aggressive behaviours	Thematic	August 2005
Phase 2	RQ3, RQ4, RQ5	QUAL	Participant observation	Direct observation of resident behaviour and staff practices as a working RN staff member over 8 months	Researcher	N= 8 residents observed	Emic experience to gain understanding of the unique aged care context. Descriptive data on resident behaviours	Reflective journal	June-November 2005
Phase 2	RQ3, RQ4, RQ5	QUAL	Interview	Investigate senior nursing management staff views	Researcher	N = 2 RN	Detailed information about how dementia care is managed in Facility X	Thematic	December 2005

5.8.4 Data Analysis

For the purpose of analysis of the collected quantitative data, each of the behaviours described by the ReBOC guide, the CMAI, and the ABMI have been placed into the following three groups based on the Cohen-Mansfield, Marx et al. (1989:M80) categories: aggressive behaviour; physically non-aggressive behaviour; and verbally agitated behaviour.

- **Aggressive behaviour** included hitting, kicking, pushing, scratching, tearing things, cursing or verbal aggression, grabbing, biting and spitting.
- **Physically non-aggressive behaviour** included pacing, inappropriate robing or disrobing, trying to get to a different place, handling things inappropriately, general restlessness, and repetitive mannerisms.
- **Verbally agitated behaviour** included complaining, constant requests for attention, negativism, repetitious sentences or questions, screaming.

An additional reason for this grouping of the 20 agitated behaviours, apart from direct comparison with other studies, was that it created larger cell sizes that facilitated a more robust analysis.

Data collected using the Facility X survey, structured observation, and clinical audit were collated in Microsoft Office Excel 2003TM spreadsheets. Descriptive statistics were used to describe and summarise data (Gravetter and Wallnau 2004:6).

The data collected from the interviews and group discussions were analysed and reported using a commonly accepted qualitative technique, thematic analysis (Creswell 1998). The analysis process comprised five steps:

1. *Organisation*. The interviews and group discussions were tape recorded and transcribed by either the researcher or a professional transcriptionist. The transcripts were then ‘cleaned’ by the researcher through a process of listening to the tape of the interview or group discussion and reading the transcribed document to check for accuracy.
2. *Categorisation*. Themes were identified and the data were clustered into meaningful categories.
3. *Interpretation*. Categories of data were examined for specific meanings in relationship to the purpose of the study.
4. *Identification of patterns*. The data and their interpretations were scrutinised for underlying themes and patterns that characterised the phenomenon of physical aggression in people with dementia and allowed the researcher to draw conclusions.
5. *Synthesis*. An overall picture of nurses and care staffs’ responses was constructed where conclusions were drawn based on the data presented (Lindner, Dooley and Kelsey 2002).

Data analysis in this study was an iterative process. Results from Phase 1 were identified requiring follow-up in Phase 2. This process provided a framework in which the quantitative data gathered in Phase 1 provided a source of questions and a stimulus for discussion during interviews and group discussions held during

Phase 2. Similarly, results from auditing the incident reports also provided valuable information. The purpose of this iterative process was to assist in forming connections between my interpretation of the data and that of the participants (Guba and Lincoln 1989:149).

5.8.5 Validity and Reliability

Reliability of the Facility X survey has not been established. However, the CMAI (from which the Facility X survey was derived) has been shown to have good validity and reliability in a number of studies conducted in a number of settings. The inter-rater reliability has been reported between 0.88 and 0.92 (Cohen-Mansfield, Marx et al. 1989; Remington 2002). The inter-rater reliability for the ABMI has been reported as 0.92 (Cohen-Mansfield, Werner et al. 1989).

As this is a mixed methods study, rigour must also be discussed for the qualitative methods. Ethnographic research (Phase 2) occurs in a natural setting, and because unique situations can never be fully reconstructed, the most exact replication of a study may fail to produce identical results (LeCompte and Goetz 1982). Qualitative research is frequently criticised for being unscientific and ‘merely an assembly of anecdote and personal impressions’ (Mays and Pope 1996:10). Some authors argue that concern about the demonstration of rigour is due to a struggle for legitimacy in a discipline that is dominated historically by the positivist paradigm (Aroni, Goeman, Stewart, Sawyer, Abramson, Thien and Douglass 1999). Thus, the criterion for judging the quality or goodness of a qualitative inquiry is not well resolved. This is partly due to the complex and evolving nature of qualitative research (Creswell 1998). As a result, rigour in qualitative research is an issue of continuing debate (Lincoln and Guba 2000).

Rigour is about the way in which researchers demonstrate integrity and competence. Rigour is 'about ethics and politics, regardless of the paradigm' (Tobin and Begley 2004:390) requiring that researchers are 'fully accountable for their data collection, analysis and interpretative methodologies' (Onwuegbuzie and Teddlie 2003:354). In mixed methods research, rigour must be demonstrated for all of the methods undertaken.

Rigour was ensured in this study by the use of a number of processes, consistent with the ethnographic data collection strategies undertaken. The overarching process for ensuring rigour in this study was the process of triangulation made possible through the mixed methods design. Triangulation in a research project involves combining, reviewing and analysing data from multiple sources for the purpose of overcoming problems of bias and validity (Blaikie 1991; Erlandson, Harris, Skipper and Allen 1993). Denzin (1970:308) proposes that the use of multiple methods or methods triangulation can overcome some of the limitations of each method as these are often the strengths in another, and at the same time permit a comparison of finding by developing a converging line of inquiry (Rice and Ezzy 1999:89; Yin 2003:98).

The verification procedures also included the production of rich and thick descriptions of behaviours and interactions between participants in the field notes, prolonged engagement, persistent observation, peer debriefing and member checks (Lincoln and Guba 1985; Guba and Lincoln 1994; Creswell 1998; Ivankova, Creswell et al. 2006).

Phase 2 was conducted within the constructivist paradigm. As such, generalisability was not the goal. Instead, the intent was that knowledge gained from one context might be relevant to other contexts or indeed the same context

in a different time because of shared characteristics. The ‘thick description’ generated will allow observers of other contexts to make informed judgements and to formulate hypotheses to guide enquiry into those contexts (Erlandson, Harris et al. 1993:32-33).

5.9 Ethical Considerations

In Australia, guidelines are available for conducting responsible and ethical research (National Health & Medical Research Council; the Australian Research Council and Universities Australia 2007; National Health and Medical Research Council; the Australian Research Council and Universities Australia 2007) because it is widely accepted that all kinds of research involving or impacting upon humans should conform to the highest standards of academic integrity and ethical practice (National Health & Medical Research Council; the Australian Research Council and Universities Australia 2007). Responsible researchers must demonstrate dignity, privacy and cultural differences of human participants, and to avoid harm (National Health and Medical Research Council; the Australian Research Council and Universities Australia 2007). Therefore, researchers have the responsibility to understand and comply with ethical principles of integrity, respect persons, justice and beneficence, and where required, gain written approval for research from a human ethics committee. Informed consent is a procedure intended to protect research participants, and is a requirement for HREC ethics approval.

Consent to participate in research must be voluntary, informed, cover the procedure/research to be undertaken, and be provided by someone who has the

legal capacity to provide a valid consent or refusal to consent (Sultzer, Levin, Mahler, High and Cummings 1992; Forrester and Griffiths 2001).

5.9.1 Informed Consent in those with Impaired Decision-Making

In the case of conducting research in those with impaired decision-making, the HREC ‘should weigh the potential benefits against risks and undue burden’ to the participant’ (National Health & Research Council 1999:38). This guideline clearly states that consent to participate in research by a person with an intellectual or mental impairment must be obtained in the first instance from the person wherever possible. However, when this is not possible, the ‘person responsible’ can be approached.

In Tasmania, and most other Australian states the ‘person responsible’, as defined in Section 4 of the *Guardianship and Administration Act (1995)*, is a person who is a substitute decision-maker for an adult who is incapable of consenting to medical treatment. This person is usually a guardian, spouse, unpaid carer or close friend or relative. The ‘person responsible’ is the legal term for NOK.

5.9.2 Informed Consent in Dementia

An ethical conundrum now arises because, on one hand, there is a need to gain a greater understanding of dementia, yet on the other, conducting ethical research involving people with impaired decision-making ability can make the informed consent process difficult to implement. Certainly, in my experience proposing an observational study of people with dementia raised some eyebrows within the State HREC, particularly in relation to the risk of potential harm *versus* the potential benefits for the participants.

The ethical approach to this study acknowledged that persons with dementia ‘however far their intellectual and emotional life has been distorted’ by the disease process must be treated with ‘the civility, dignity, and compassion’ expected in a civilised and moral society. However, pragmatically ‘the fact remains that the essential element of dementia is an intellectual decline’ (Foley and Post 1994). Therefore, in recognition of the intellectual decline, informed consent was ideally to be sought from a spouse or adult child or sibling who has an idea of what the person with dementia would want if he or she were able. If the guardian or NOK gives consent, and if the resident cooperates (in this instance residents’ cooperation involved them undertaking their usual daily activities), ‘reasonable people’ would agree that autonomy has not been violated (Foley and Post 1994). However, Yarborough (2002) would argue that true respect has not been shown to the resident when consent is sought from another, reminding us of the Kantian approach, which argues we should never use people as mere means to other people’s ends.

People with mild to moderate dementia have been shown not to understand proposed medical treatments, suggesting that some older adults with dementia will have problems with the capacity of understanding, especially when the dementia is more severe (Moye, Karel, Azar and Guerra 2004:172). How then do you explain to a person with dementia the concept of observation? Further, clinical staff, familiar with the residents and their level of cognitive decline, deemed them unable to understand the proposed research project and therefore unable to provide informed consent. Does this imply that obtaining consent from the NOK is an action that removes a resident’s opportunity to consent to what we

are doing? Are we then treating them as mere means to an end? I do not believe so.

This research produced a descriptive account of how physically aggressive behaviours exhibited by people with dementia are managed by care staff. This non-interventionist, observational study did not involve modifying or interfering with the residents' usual care or daily routine. The data from the project will be used to identify how care can be improved, in an attempt to provide timely, effective and appropriate care to people with dementia in the future. Moreover, I was aware of and acknowledged that the residents involved were not a homogeneous group, experiencing dementia due to different aetiologies, progressing at different rates. Some residents had a form of dementia whereby they had lucid moments, and insight into their situation. Others did not.

It was recognised, that as a general principle, 'the deception of, concealment of the purposes of the study from, or covert observation of, identifiable participants is not considered ethical because it is contrary to the principle of respect for persons in that they are free and fully informed consent cannot be given' (National Health & Medical Research Council 1999:63). However, in some fields of research, like this study of human behaviour 'there may be exceptional circumstances ... where studies cannot be conducted without deception, concealment or covert observation of participants' (National Health & Medical Research Council 1999:63).

For the purposes of this study, it was decided to seek informed consent from the residents' NOK. However, this process was subsequently raised by the State Ethics Committee as a 'potential risk' because many residents living in residential aged care do not have an 'official' diagnosis of dementia and, for

example, their families may be confronted by the diagnosis for the first time. Key informants suggested that this is because the onset of dementia is insipid and slow, many GPs hesitate to make a definitive diagnosis.

To mitigate against the ‘potential risk’, a revised list of potential participants was developed in conjunction with the DON, NUM and Resident Advocate, which excluded those whose families may not be aware of the presumed diagnosis of dementia, or who were in denial of the resident’s cognitive decline. The family members, or NOK, who were deemed by the DON, NUM and Resident Advocate as likely to be distressed were not contacted, thereby excluding many residents from the project.

The inclusion criterion for resident participation was a history of exhibiting physically aggressive behaviours in the facility. Potential resident participants were subsequently identified by the DON, NUM and Resident Advocate. The Resident Advocate was a person who acted as a liaison between the facility, the residents and their families providing counselling and support where required. The fact that I had been employed as a Registered Nurse previously in the facility and may have met some of the NOK might have been an ethical issue, as the identity of the person who is asking for consent can also affect the consent process (Cohen-Mansfield 2003:S23). As the possibility of coercion was to be avoided, I had no contact with the NOK, rather information sheets and consent forms were distributed by the Resident Advocate who then sought consent from each NOK.

It must be acknowledged here that the Resident Advocate worked tirelessly for many weeks. Her intimate knowledge of the residents identified further issues in terms of obtaining informed consent, namely: many of the NOK

were frail aged themselves and probably would not truly be able to provide informed consent, other NOK were interstate, and in one instance the NOK were un-contactable as they were living overseas. Eventually, a cohort of residents was identified who had a documented diagnosis of dementia and whose families knew and accepted this diagnosis. It must be noted here that ‘documented diagnosis’ did not mean that the residents had undergone diagnostic testing as recommended (AIHW 2003a; Pond and Brodaty 2004; Brodaty 2007), but rather that they had been informally diagnosed by their ACAT assessor, GP or the Registered Nurses in the facility. The NOK for this group of residents were provided with information about the proposed project, following which they did not ‘hesitate’ to consent and were ‘very happy’ for their family member to be involved in the study (verbal communication Resident Advocate 13 July 2005).

Ethics approval for Phase 1 was obtained from the University of Tasmania’s Social Sciences HREC (Ref. No. H8297). This component of the project required a Minimal Risk Ethics Application (see Appendix H). Ethics approval for Phase 2 was then sought for the remainder of the project (Ref. No. H8304). The DONs of the participating facilities (n=15) each gave their permission for the involvement of their facility in Phase 1 of the project, and the DON and CEO of Facility X gave permission for that facility to participate in both phases (see Appendix I).

Of the 56 residents in the unit under study in Facility X, fifteen met the inclusion criteria for the project. Of these fifteen, only nine were able to be recruited for the study, with informed consent being given by the NOK for eight of the residents (see Table 5.3).

Table 5.3: Characteristics of Participating Residents

Resident	Age at time of data collection	Admission time	Gender	Diagnosis	BoC documented in nursing notes
A	94	2.5 years	F	No formal dementia diagnoses	Physical aggression Socially inappropriate behaviour Wandering
B	81 Deceased	1 year	M	Short-term memory loss	Physical aggression Socially inappropriate behaviour
C	92	3 years	M	Confusion ?CVA	Verbal aggression Physical aggression
D	86	1.66 years	F	Progressive dementia No formal dementia diagnoses	Wandering Verbal aggression Resistance to care Socially inappropriate behaviour
E	88	2 years	F	Short-term memory loss	Physical aggression
F	82 Deceased	2 years	F	Confusion	Wandering Verbal aggression
G	92	5.75 years	F	No formal dementia diagnoses	Verbal aggression Physical aggression Resistance to care
H	100 Deceased	12.5 years	F	Alzheimer's Disease	Verbal aggression Physical aggression Sexually inappropriate behaviour Resistance to care Wandering

5.9.3 Access to Clinical Records

Obtaining access to resident clinical records proved problematic in terms of obtaining ethics approval. The DON argued that the records were the property of the facility and therefore she could give permission for access for the purpose of this research. Conversely, the University of Tasmania HREC argued that the records belonged to the resident and the GPs who had written information in

them. Therefore, as part of the process of obtaining informed consent, permission was sought from the NOK to access the residents' records. Permission was also sought from the GP providing care for each resident (see Appendix G). One GP was particularly interested in the research and gave freely of his time to discuss the insidious nature of the dementing process and the manifestation of BoC.

The establishment of this project identified a number of potential barriers for conducting observational research involving people who have dementia, namely: an absence of documented diagnosis; non-disclosure of diagnosis to the resident and/or their family; and non-acceptance or denial of a diagnosis of dementia by either the resident or their family. Given that the most important protection for human research subjects is the personal, moral character of the researcher, this study has demonstrated how the potential barriers to consent can be overcome by collaborative efforts between the research team, the facility and staff involved in the study and the families of the residents, and that respect for the participants is demonstrated.

As Tasmania is a small state, with few residential aged care facilities, it was extremely important to conduct this project with the greatest consideration for issues of confidentiality and anonymity. Problems arose during PhD seminar presentations when, as part of the school's policy on sharing research outcomes, nurses from the aged care sector were present during my presentations. As there was a potential for Facility X and nursing, care staff and resident participants to be identified, only findings from Phase 1 were discussed.

5.10 Study Limitations

Several actual and potential limitations were recognised in the implementation of the explanatory mixed methods design used in this study.

5.10.1 Sample Size Restricted by Consent Requirements

The first limitation was on data collection imposed by the rigorous consent requirements for conducting research involving people with cognitive decline (see Section 5.9). This resulted in fewer than anticipated resident participants recruited to the study. The limited number of participants also reduced the likelihood of observing incidents of BoC. Expanding this study to more than one facility in Phase 2 did not fit into time and budget constraints. Having more participants in more than one facility, however, does not necessarily mean that the findings would have been different. This limitation was effectively overcome by the mixed methods design that utilised three methods to collect resident data, thus contributing to a more complete picture than if only a single method and small sample had been used.

5.10.2 Time

Another limitation was the intensive data collection processes related to the seven methods used. Participant and structured observation are particularly time-consuming data collection methods. However, the rich data these methods produced was worthy of the time investment.

5.10.3 Limitations Relating to the Collection of Observational Data

There are several identified limitations to data collection using participant observation. The first is the presence of an observer, particularly in a small

confined setting, such as that which is the subject of this data collection activity, which may stimulate alterations in behaviour of those being observed. This phenomenon is one form of the Hawthorne effect (Roethlisberger and Dickson 1939). In an attempt to minimise the effect of the observations on the setting and participants, I participated in the activities taking place in the unit and, in a sense, tried to blend into the environment (Turnock and Gibson 2001). As my presence gradually became more accepted within the unit, it was hoped that any effect that my observation had on the participants would decrease (Bowling 1997).

The second limitation to participant observation is the dilemma of deciding how much time to spend at the research site. While a long engagement provides more opportunities for personal interaction, gathering greater amounts of data and constructing shared realities with persons in the setting being studied, the disadvantage includes 'the danger of the researcher over-identifying with the respondents and thereby destroying the value that can be brought to shared constructions by an outside observer' (Erlandson, Harris et al. 1993:59). While I certainly empathised with both the staff and residents, I do not think I could be accused of 'going native' in the relatively short period of time I was there. Conversely, a short engagement may limit the amount of data that can be gathered. In this project, I spent eight months observing and interacting with the staff and residents to develop an understanding of how they interacted on a day-to-day basis, and how aggressive behaviours manifest. To record these interactions field notes were written at discrete opportunities, describing daily events and behaviours of the residents as they occurred.

One of the practical limitations of being a 'participant observer' is the lack of time during the period of engagement to document observations. I had to rely

on my recall at either the end of the shift or the following day to record the events I decided were important to my project. Another substantial limitation is the amount of time required to gather sufficient data. At the end of the four months, I felt that I had reached saturation. I was no longer seeing or hearing anything new, and decided it was time to withdraw. However, due to the uniqueness of each resident-staff interaction, I could easily have spent many more months immersed in this facility. The predetermined timeframe of this project did not allow such an indulgence, or as Lincoln and Guba (1985:233) state, a longer period of observation cannot always 'be justified in terms of the additional outlay of energy and resources'.

5.10.4 Limitations Relating to Participant Recall

Both the survey across fifteen RACFs and the survey administered to nursing and care staff in the target facility, Facility X, collected data that relied on the recall of events by nursing and care staff. Data collection using participant recall is a similar technique to data collection through self-reporting, a common practice in health-based research. Self-reporting, such as required for the BoC survey and the Facility X survey, can be associated with recall or retrospective bias. A number of health related studies have investigated the validity of self-reporting and many found this to be a reliable source of data, for example, in the reporting of injury and crash data (Begg, Langley and Williams 1999), in the use of preventative health services (Klein, Graff, Santelli, Hedberg, Allan and Elster 1999), in providing estimates of sports injuries (Valuri, Stevenson, Finch, Hamer and Elliott 2005), and for obtaining information in relation to the sexual behaviour of people with AIDS (Coxon 1999). However, others argue that self-reporting

‘cannot validly replace more objective observational measures’ (Van der Beek, Braam, Douwes, Bongers, Frings-Dresen and Verbeek Stijn Luyts 1994:177).

5.10.5 Limitations Influencing Choice of Statistical Analysis

Analysis of the quantitative data collected in Method 3 required the selection of an appropriate statistical test. Observing a small number of aggressive behaviours restricted this choice. The Chi Square test was chosen. The association between resident sleep and manifestation of BoC was used to test the appropriateness of this choice. The result showed that nearly half of the observations of ‘no unusual behaviour’ occurred while the residents were sleeping. While this seemed an obvious finding (because residents are unlikely to be exhibiting BoC while asleep), it confirmed the validity and integrity of the chosen statistical process and therefore was adopted as an indicator for best choice of statistical analysis.

While a number of limitations have been identified specific to particular methods used in this study, one of the most salient features of mixed methods research design is the use of multiple methods providing a way of overcoming limitations inherent in each method.

5.11 Summary

This chapter has provided a detailed account of the research design and the research methods to collect and analyse data capable of answering the research questions. The research was conducted in two phases using an explanatory mixed methods design. An overview of the mixed methods approach was provided, together with detailed explanations of each of the two phases within the study. Phase 1, the quantitative phase, used a survey to rank order the incidence and impact of ten BoC, and to clarify whether BoC were of concern to nursing and

care staff in Tasmanian RACFs. Phase 2 was described as primarily qualitative, and adopted an ethnographical approach. Six data collection methods were employed to examine the findings from Phase 1 further. This research design provided a more complete account of the phenomenon than has previously been reported. Moreover, the mixed methods design provided data and results that could be confirmed using the triangulation process. An in-depth discussion of many issues surrounding conducting research with participants who have diminished cognitive ability concluded the chapter. Chapter 6 presents the findings from Phase 1.

Chapter 6

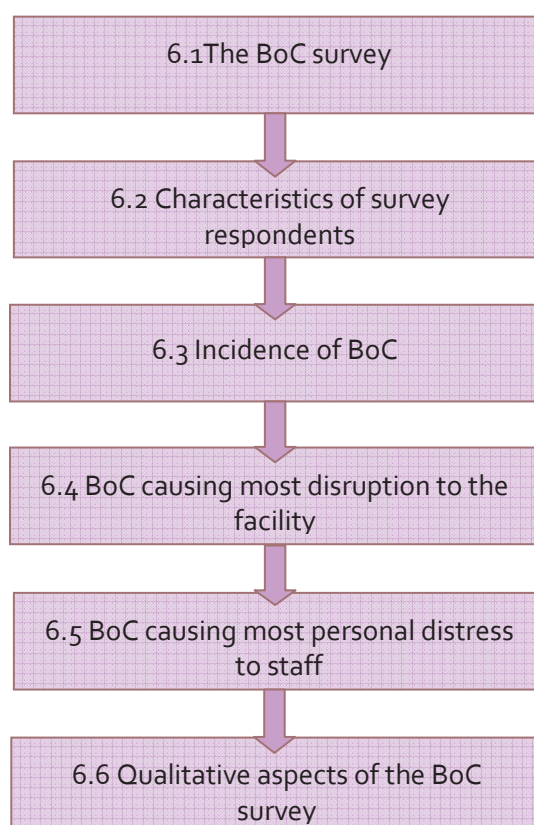
Phase 1: Determining the Incidence of Physically Aggressive Behaviour in an Australian Context

Phase 1 of this study was undertaken to determine the incidence of BoC, specifically physically aggressive behaviour, within the context of Australian aged care. Studies to date reporting incidence had been conducted in a variety of different settings using a variety of methods and data collection strategies. Estimates range from very low incidence to very high incidence. For example, in international studies, 10.3 per cent to 89 per cent of care staff reported being exposed to physically aggressive or abusive behaviours and fifteen per cent to 86.3 per cent of residents have been reported to exhibit aggressive behaviours (see Section 3.1.3). Variance across community and residential care setting were also found in the reported studies. Thus, it is difficult to know how to make judgements about estimates, but the consensus is that it is not insignificant and needs to be addressed. Anecdotal evidence suggested that physically aggressive behaviours occurred frequently. Thus, a systematic quantitative study was necessary to disambiguate the issue of incidence of physically aggressive behaviours in an Australian context.

The purpose of Phase 1 was threefold: to investigate the incidence of BoC, including physically aggressive behaviour, exhibited by residents with dementia; to rank order the BoC from most to least disruptive to the everyday running of facilities, and to rank order the BoC on the basis of their causing personal distress to staff (from most to least). Data were collected using the BoC survey in fifteen

Tasmanian RACFs. This chapter reports on the data collected in Phase 1. The chapter structure is depicted in Figure 6.1.

Figure 6.1: Chapter 6 Structure



6.1 The BoC Survey

The BoC survey was administered to nursing and care staff in fifteen Tasmanian RACFs. The first of three questions asked participants to estimate how often each of the ten BoC were exhibited in their facility in their last working week (Never, Once/week, 2-6 times/week, Once/day or More than once/day). A second question asked participants to rank order the BoC in terms of the disruption they caused to the running of the facility, and a third question asked respondents to

rank order the BoC in terms of the personal distress they caused to themselves; where 1 represented the most disruptive or personally distressing BoC, and 10 being the least disruptive or personally distressing behaviour. A space was provided for participants to list any other behaviour of concern or comments. The findings of the BoC survey have been published.¹³

6.2 Characteristics of Survey Respondents

Employment status, qualifications and duration of current job mostly mirror the characteristics of Registered Nurse and Enrolled Nurse respondents working in residential aged care facilities nationally (Australian Bureau of Statistics 2001; AIHW 2003; Healy and Richardson 2003). More than half of the Registered Nurses (51 per cent) reported holding a tertiary qualification, including a Bachelor of Nursing, Bachelor of Science (Nursing) or Graduate Certificate in Aged Care, Geriatrics, Education or Management. Almost 90 per cent of Enrolled Nurses were Medication Endorsed. Of the 124 Personal Care Assistants who responded, 80 per cent had completed Certificate III or IV. Ten of the respondents employed as Personal Care Assistants reported having no formal qualifications.

Registered and Enrolled Nurse respondents tended to be in their current job longer than the national average (see Table 6.1). However, four times the number of Personal Care Assistants respondents reported having a Certificate III or IV and almost twice as many were working full-time compared to Personal Care Assistants employed in residential care nationally (see Table 6.1).

¹³ Cubit, K.A., Farrell, G., Robinson, A., Myhill, M. (2007). A survey of the frequency and impact of Behaviours of Concern in dementia on residential aged care staff, *Australasian Journal on Ageing*, Vol. 26, No. 2, pp. 64-70.

Table 6.1: Characteristics of Participants Compared to National Aged Care Workforce

Characteristic		Phase 1 participants	National workforce
Employment (% full-time)	Registered Nurse	33	26 ¹
	Enrolled Nurse	19	25 ¹
	Personal Care Assistant	45	23 ¹
Qualifications (% with this qualification)	Registered Nurse-tertiary	48	39 ²
	Enrolled Nurses-medication endorsed	88	-
	Personal Care Assistants-Certificate III or IV	80	22 ²
Duration of current job (% more than 5 years)	Registered Nurses	67	47 ³
	Enrolled Nurses	69	50 ³
	Personal Care Assistant	51	48 ³

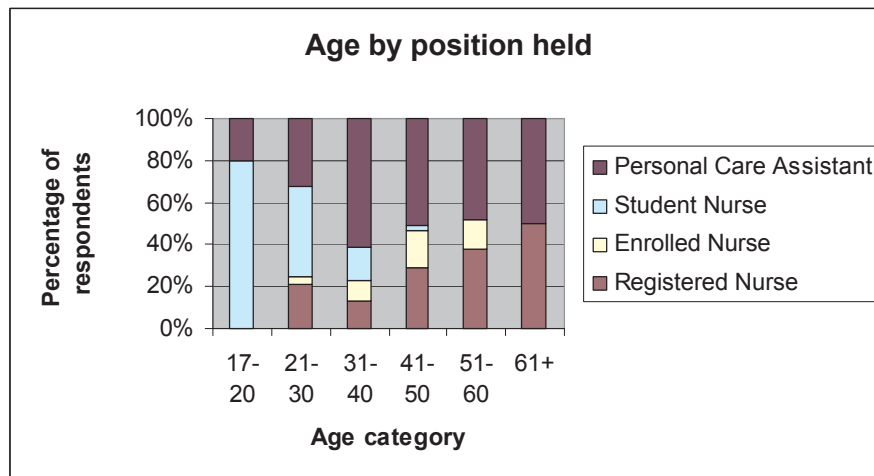
1 – AIHW 2003

2 – Australian Bureau of Statistics 2001

3 – Healy and Richardson 2003

Seventy four per cent of Registered Nurses and 83 per cent of Enrolled Nurses in this study reported being over 40 years of age, similar to the national picture in which the average age of Australian nurses working in aged care is 47 years old (Illiffe 2003). Nationally, only one quarter of Registered Nurses working in aged care are less than 40 years of age, while closer to half of the Personal Care Assistants are in this category (Healy and Richardson 2003). In the current study, 62 per cent of Personal Care Assistants reported being aged over 40 years (see Figure 6.2).

Figure 6.2: Age of Respondents by Position held in Facility (n=257)



6.3 Incidence of the BoC

Respondents were asked to estimate how often each of the ten BoC were exhibited in their facility in their last working week (Never, Once/week, 2-6 times/week, Once/day, More than once/day). For a large majority of staff (84 per cent) the most frequent behaviour was ‘repetitive actions or questions’, which occurred more than once/day, followed by ‘wandering and intrusiveness’ (69 per cent), and ‘verbal disruption’ (61 per cent). Physically aggressive behaviour was reported as the second least frequent occurring BoC with 27 per cent of staff indicating that this behaviour occurred more than once/day (see Table 6.2).

Staff characteristics influenced their reporting of incidence of BoC. Age was significant in the reporting of incidence of physical aggression with respondents aged less than 40 years reporting a greater frequency of physical aggression $\chi^2(2, n=243) = 7.144, p \leq 0.05$.

The length of time worked in aged care was also a significant factor in the reporting of physical aggression, with those who had worked in aged care for

more than five years reporting a reduced frequency of physically aggressive behaviours $\chi^2(2, n=245) = 10.415, p \leq 0.01$.

Table 6.2: Percentage of Staff Reporting Incidence of Each BoC (n=259)

Behaviour of Concern	Never	Once/week	2-6 times/week	Once/day	More than once/day
Repetitive actions or questions	1	2	7	5	84
Wandering or intrusiveness	2	5	12	11	69
Verbal disruption	2	8	12	14	64
Sleep disturbances	5	6	13	12	60
Problems associated with eating	3	8	17	11	56
Resistance to personal care	3	7	17	16	53
Socially inappropriate behaviour	8	12	14	13	49
Refusal to accept services	7	19	22	17	34
Physical aggression	12	28	15	14	27
Sexually inappropriate behaviour	27	32	16	6	9

† Due to missing data and rounding of numbers, not all totals will equal 100%

As the focus of this thesis is on physically aggressive behaviours, it was interesting to explore whether there was an association between the staffs' perception of incidence of physically aggressive behaviour and facility in which it occurred.

To facilitate the analysis a number of facilities were excluded. One facility was excluded as an outlier because it was a secure dementia unit in which staff

reported a substantially greater frequency of physically aggressive behaviour than did staff in any of the other facilities. Inclusion of this facility in this analysis would have skewed the results. Ten other facilities were excluded as their total number of responses to the survey was less than 20 (less than 20 survey responses could not produce a significant result).

To further facilitate this analysis in view of the small cell sizes, the five frequency categories were collapsed to three new categories with ‘never’ and ‘once/week’ collapsed to ‘almost no physically aggressive behaviour’, ‘2-6 times/week’ not collapsed, and ‘once/day’ and ‘more than once/day’ collapsed to ‘at least once/day’ (see Table 6.3).

Table 6.3: Perceived Incidence of Physically Aggressive Behaviours in Four Facilities

Facility	Almost no physically aggressive behaviour	2-6 times/week	More than once/day	Total responses
Facility W	7	6	7	20
Facility X	19	2	19	40
Facility Y	19	7	5	31
Facility Z	19	3	8	30

Using this frequency system, no statistical relationship was found between the incidence of physical aggression and the facility in which it occurred $\chi^2(6, n=121) = 15.599, p \leq 0.05$. That is, there was no significant difference in staffs’ perception of the incidence of physical aggression between the four facilities. This finding influenced the decision to select Facility X (see Section 5.13).

6.4 BoC Causing Most Disruption to the Facility

A second question asked respondents to rank order the BoC in terms of the disruption they caused to the running of the facility. ‘Verbal disruption’, ‘wandering or intrusiveness’ and ‘repetitive actions or questions’, were ranked 1, 2 and 3 respectively as causing most disruption to the everyday running of the facilities, with the BoC ‘sexually inappropriate behaviour’ ranked the least disruptive. While not in the top three BoC causing disruption, physically aggressive behaviour was considered the fifth most disruptive BoC (see Table 6.4). No significant correlation was found between staff characteristics and their ranking of BoC as disruptive to the running of the facility.

Table 6.4: BoC Reported as Most Disruptive to Everyday Running of the Facility (n=259)

BoC	Rank	Mean	Median
Verbal disruption	1	3.38	2
Wandering or intrusiveness	2	3.71	3
Repetitive actions or questions	3	4.38	4
Resistance to personal care	4	4.56	4
Physical aggression	5	4.63	4
Problems associated with eating	6	5.61	6
Socially inappropriate behaviour	7	5.73	6
Refusal to accept services	8	5.86	6
Sleep disturbances	9	5.87	6
Sexually inappropriate behaviour	10	7.43	9

6.5 BoC Causing Most Personal Distress to Staff

The third question asked respondents to rank order the BoC in relation to the personal stress they caused. ‘Physical aggression’, ‘verbal disruption’, and ‘wandering or intrusiveness’ were ranked 1, 2 and 3 respectively by staff as the most personally distressing BoC to deal with, with ‘sleep disturbances’ ranked least distressing (see Table 6.5). No significant correlation was found between staff characteristics and their ranking of BoC as causing personal distress.

Table 6.5: BoC Reported as Most Personally Distressing to Care Staff (n=259)

BoC	Rank	Mean	SD
Physical aggression	1	3.56	3
Verbal disruption	2	3.78	3
Wandering or intrusiveness	3	4.82	3
Resistance to personal care	4	4.93	5
Repetitive actions or questions	5	5.30	3
Socially inappropriate behaviour	6	5.80	3
Problems associated with eating	7	5.87	3
Sexually inappropriate behaviour	8	5.97	3
Refusal to accept services	9	6.00	5
Sleep disturbances	10	6.49	3

6.6 Qualitative Aspects of the BoC Survey

Forty two participants, 21 per cent of Registered Nurses, 28 per cent of Enrolled Nurses and twelve per cent of Personal Care Assistants provided additional information in the open section. Four themes were identified from these comments: frustration, empathy, tolerance and family aggression.

Some of the Registered Nurses (n=4) indicated their frustration in caring for residents with comments about the ‘mantra like singing of help’; residents ‘playing in faeces and soiled continence pads’; residents’ lack of insight into their own abilities, particularly in relation to mobility and the risk of falls; and the difficulty engaging some residents in activities due to their ‘short attention span’. Frustration was also evident in some comments (n=2) from the Enrolled Nurses who listed other BoC as ‘refusing to take medications’, ‘obsessive compulsive behaviours’, and the institutionalisation of residents who then expect everything to be ‘done for them’.

Empathy for the residents was evident from eight of the respondents in their use of language such as ‘inconsolable’, ‘depressed’, ‘frustrated’ and ‘withdrawn’. A Registered Nurse wrote of the ‘residents’ anxiety and stress at not being able to understand their situation’ while one Personal Care Assistant even went so far as to suggest early dementia was frustrating for the resident ‘causing depression and self-harm tendencies’.

In contrast, some respondents (n=3) seemed to accept or tolerate resident behaviours and chose instead to write how BoC in dementia do not cause them stress as it is ‘part of the job’ and that perhaps ‘if you can’t handle the behaviours [you should] get out of the job’.

Family aggression and lack of insight into a family member's dementia was also noted by respondents (n=5) as BoC to them. Respondents indicated that some families 'lacked insight', and were 'aggressive' and that they showed a 'lack of acceptance of [their] relative's problems'.

The quantitative findings were unanticipated because, based on published research, the levels of aggressive behaviour recalled by participants was expected to be much higher. Therefore, because the results from Phase 1 were in direct opposition to the literature the approach taken to inquire about aggressive behaviours required rethinking. It was possible that nursing and care staff did not consider many of the manifest behaviours to be aggressive. To overcome this, in Phase 2, a survey was administered to a smaller cohort, asking nurses and care staff in one RACF to recall the incidence of more explicitly defined behaviours.

6.7 Summary

The purpose of Phase 1 was threefold: to investigate staff perceptions of the incidence of BoC exhibited by residents with dementia, to rank order the BoC from most to least disruptive to the everyday running of facilities, and to rank order the BoC on the basis of their causing personal distress to staff (from most to least).

Residents' repetitive actions or questions, wandering or intrusiveness, and verbal disruption, in that order, were reported by staff as the most frequently occurring BoC. Verbal disruption, wandering or intrusiveness and repetitive actions or questions were perceived to be the three most disruptive BoC to the running of the facilities, whereas physical aggression followed by verbal disruption, and wandering or intrusiveness were ranked 1, 2, and 3 respectively by

respondents as the BoC causing them most personal distress. Phase 1 of this study suggests that while repetitive actions and wandering behaviours occur most frequently, it is the residents' aggressive behaviour that causes one of the highest amounts of disruption to the facility and has the greatest personal impact on care staff. Therefore, resident physically aggressive behaviours occur at a low frequency but have a high impact on nursing and care staff. These findings confirmed that the three factors depicted in the conceptual framework were integral to this study, but raised the questions as to the nature of the relationship between the factors of dementia, BoC, and nursing and care staff in the residential aged care sector. The next phase of this research aims to examine the contextual factors that contribute to the relationship between these factors.

Data collected using the Facility X survey and from structured observation of resident participants in Facility X are presented in Chapter 7.

Chapter 7

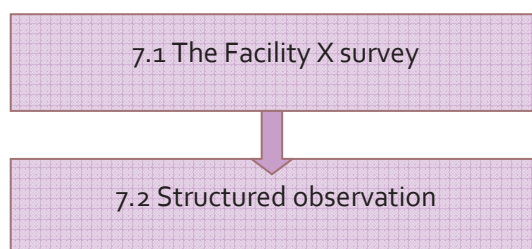
Phase 2: Investigating the Management of Physically Aggressive Behaviour in One RACF

Chapter 6 presented the findings from Phase 1 of this study. The second phase (Phase 2) was undertaken to investigate the contextual factors contributing to the phenomenon of physically aggressive behaviour in considerably more detail. To explore these factors, it was important to determine which specific aggressive behaviours were occurring in Facility X, and the reporting practices of staff in relation to aggressive incidents. This chapter then focuses on the following questions:

1. What is the incidence of physically aggressive behaviours among residents who have dementia in a Tasmanian RACF?
2. What are the reporting practices of nurses and care staff in relation to physically aggressive behaviours?

The ethnographic approach adopted in Phase 2 included data collection using both qualitative and quantitative methods. Data collected from two of the quantitative methods are presented next: data collected from the Facility X survey (see Appendix B) administered to nursing and care staff in the target facility, and data collected during a period of structured observation using a modified form of the ABMI, also conducted in Facility X (see Appendix F). The structure of Chapter 7 is depicted in Figure 7.1.

Figure 7.1: Chapter 7 Structure



7.1 The Facility X Survey

As outlined in Section 5.7.3.1, this survey was completed by 25 nursing and care staff employed in Facility X. The intent was to ask more explicitly about ‘physical aggression’ through identifying the occurrence of more specific behaviours such as biting and hitting. The aim was to obtain information that is more detailed about the nature of aggressive behaviours by exploring staff perceptions of the incidence of BoC, and investigating staff rationale for completing incident reports following episodes of aggressive behaviour by residents.

7.1.1 Characteristics of the Survey Respondents

Nearly half of the respondents who had completed the survey had worked in the facility for between one and five years (40 per cent, n=10) with eight working in the RACF for longer than ten years. The majority of respondents (n=15) had worked in residential aged care for longer than ten years. All respondents were aged between 31 and 60 years, with 40 per cent aged in the 51 to 60 years category. Sixteen respondents were female and nine were male in the survey sample. Seventeen of the responding staff were Registered Nurses. Eight of these

Registered Nurses held a Bachelor of Nursing, one held a Bachelor of Nursing and Midwifery, and one had gained a clinical Masters degree. Other respondents included one medication endorsed Enrolled Nurse, six Personal Care Assistants with a Certificate III and one Personal Care Assistant with a Certificate IV. There was an equal distribution of responses to the question on employment. Eight were full-time, nine were part-time, and eight were employed on a casual basis.

7.1.2 Frequency of Behaviour

Respondents were asked to indicate the frequency at which 20 agitated behaviours, as described in the CMAI, had occurred in their last working week. A Likert scale was used to record the frequency (not at all, once/week, several times/week, once/shift, several times/shift). A large proportion of staff (40 per cent) indicated that screaming occurred more than once/day, followed by offensive speech (20 per cent) and negative criticism (twelve per cent). The majority of staff (96 per cent) reported that stabbing (for example, with a pen, knife or fork) had not occurred in their last working week and was thus the least frequently occurring behaviour. These findings are outlined below in Table 7.1.

Table 7.1: Percentage of Staff Reporting Frequency of Each Behaviour (n=25)

Behaviour	Never (%)	Once/week (%)	2-6 times/week (%)	Once/day (%)	More than once/day (%)
	Never	Infrequently		Frequently	
Screaming/yelling	20	20	12	8	40
Offensive speech	28	20	28	0	20
Negative criticism	36	28	16	8	12
Grabbing	56	12	12	12	8
Resistance to personal care	44	12	24	12	8
Threatening language	32	40	12	8	8
Insults/unkind speech	36	16	36	4	8
Verbal accusations	64	12	12	4	8
Scratching	80	8	0	4	8
Combativeness	56	28	4	8	4
Punching	88	0	4	8	0
Shoving	80	12	0	4	4
Slapping	80	4	8	4	4
Kicking	84	8	4	4	0
Pinching	92	0	4	4	0
Biting	92	0	4	4	0
Spitting	88	8	0	4	0
Throwing objects	84	12	0	0	4
Pulling hair	88	12	0	0	0
Stabbing	96	4	0	0	0

† Due to missing data and rounding of numbers, not all totals will equal 100%

To facilitate the analysis in view of the small cell sizes, the time categories once/week and two to three times/week were collapsed into 'infrequently', and the categories once/shift and several times/shift are collapsed into 'frequently'. Using this frequency system, screaming was the most frequent behaviour (48 per cent, n=12). Offensive speech, negative criticism, grabbing and resistance to care were the next four most frequently reported behaviour as perceived by 20 per cent (n=5) of staff. Stabbing is perceived by 96 per cent (n=24) of staff as the most infrequent behaviour followed by pinching and biting (92 per cent, n=23).

When the behaviours are grouped according to the categories, aggressive, physically non-aggressive, and verbally agitated (see Section 5.6), staff reported verbally agitated behaviours as occurring more frequently than aggressive behaviours. Of those behaviours considered aggressive, eight per cent of staff reported scratching and grabbing as occurring more than once/day. The majority of staff (80-96 per cent depending on the behaviour identified) considered that aggressive behaviours had not occurred during their last working week.

7.1.3 Incident Reporting

As a part of the survey, respondents were asked to identify what influenced their decision to complete an incident report following an episode of any of the 20 listed behaviours. The majority of staff stated they would complete an incident report if any of the behaviours listed on the survey occurred during their shift (Yes=15, No=10). The reasons given for completing an incident report varied, with many staff citing more than one reason. The majority of respondents indicated that the occurrence of injury to a staff member or resident influenced their decision (n=9). The legal need to complete documentation was noted by five staff as driving their decision to document incidents on an incident report. Other

reasons included: the severity of a BoC (n=3); whether the resident frequently exhibited a BoC/the BoC was known or accepted by staff (n=4); if the BoC is a new behaviour for that resident (n=1); the need to assess, monitor and plan management of BoC (n=4); and to assist in staff education (n=2). One staff member also suggested that there was a perceived pressure from management not to complete incident reports, which had discouraged staff from doing so.

Staff were more likely to verbally report an incident rather than complete a written incident report (verbally report=20, not verbally report=4, no response=1). Verbal reports of incidents were provided to a variety of people within the facility: the Registered Nurse (n=8), during handover (n=5), the NUM (n=5), fellow Personal Care Assistants (n=1), and the DON (n=1).

The final part of the survey asked staff to reflect on a situation involving an aggressive incident, and to consider what might have assisted them to have prevented or managed that situation better. Most staff considered that withdrawing from the resident and reapproaching him or her later would have resulted in a more positive outcome (n=7). Other comments indicated that other useful alternative approaches might be: anticipating the BoC (n=5); using a quiet or low stimulus area (n=4); and having more staff education (n=1). However, the unavoidable nature of some BoC (n=1), the lack of time and staff (n=2), and a lack of access to psychiatric services and diversional therapy (n=2) were also cited as realistic factors impeding the staff's ability to prevent or manage BoC.

However, given the comprehensive Literature Review and the comments from the key informants from the aged care sector, the findings from Facility X survey, similar to those of the BoC survey, were somewhat unexpected. On a broad scale, the BoC survey sought information on 'physical aggression'.

However, this is a general term that is open to many different interpretations by respondents. Thus, in the Facility X survey, respondents were asked about specific behaviours, such as biting and hitting. The findings of both the BoC survey and the Facility X survey indicated that aggressive behaviours only occurred infrequently (i.e. less than once/week) in the residential aged care setting sampled.

Van der Beek and colleagues (1994) argue that objective observational data are considered more valid than data collected through self-reports. Therefore, with consideration of the purpose of the study, the conceptual framework and the results from the BoC survey and Facility X survey, an observational study was conducted in Facility X to observe resident behaviours directly.

7.2 Structured Observation

The BoC survey and the Facility X survey identified that physically aggressive behaviours occurred infrequently in Tasmanian RACFs. More specifically, 80 to 96 per cent of nursing and care staff in Facility X reported that specific aggressive behaviours, such as punching, shoving, kicking, pinching and biting had not occurred in their last working week. However, data generated by both these surveys relied on participant recall, which may be limited by retrospective bias. Therefore, to investigate the incidence of BoC within Facility X in much more detail, a third quantitative method, structured observation, was undertaken.

The purpose of the structured observation was to observe, define and record systematically the behaviour of the eight selected residents living in Facility X for whom consent had been given (see Section 5.8). Resident characteristics are reported in Table 5.3. A modified form of the Agitated

Behaviour Mapping Instrument (ABMI) was used to collect data (see Appendix F).

7.2.1 Time of Observations

Eight resident participants were observed undertaking activities according to their usual routine in Facility X. The observation times were spread to sample across the 24-hour day to sample a range of times and activities (see Table 7.2). The delivery of care to people with dementia is largely set in routine. There are key periods in the day during which particular activities occur. My experience as a Registered Nurse in Facility X ensured I was well aware of the normal daily routines of the resident participants. Most of the observations were conducted between 1500 and 1700hrs (37 per cent), which is referred to as the ‘sundowning period’ (Ryden, Bossenmaier and McLachlan 1991; Dewing 2003; Bachman and Rabins 2006), and between 0800 and 1000hrs (24.1 per cent), which is the hygiene care period (Ryden, Bossenmaier et al. 1991). These two periods cover the times of the day when most of the physically aggressive behaviours are expected to occur. Residents in Facility X were frequently being assisted to bed from 1600hrs onwards, with the majority of residents being in bed by 1800hrs. In addition to time sampling during the key periods (sundowning and hygiene care), sampling also occurred across the night. This was conducted because there was anecdotal evidence to suggest that this was a ‘quiet’ period and so it might be able to provide a contrast to the more active periods.

Table 7.2: Time of Observations

	Time period	Number of observations	Per cent of observations
Hygiene Care	0001-0600 hrs	46	23.6
	0801-0900 hrs	21	10.8
	0901-1000 hrs	26	13.3
	1001-1500 hrs	19	9.7
Sundowning period	1501-1600 hrs	29	14.9
	1601-1700 hrs	43	22.1
	1701-2400 hrs	11	5.6
	Total number of observations	195	100.0

7.2.2 Frequency of Behaviours

The ABMI provides a means for observing and recording behaviours of residents in the institutional setting. Descriptions of 30 behaviours are included together with descriptors for location, activity, other persons present, body position, environment (hot, cold, noisy, quiet, light, dark), and the presence/absence of restraints. The data recorded under environment will not be discussed here as it is considered subjective rather than objective data.

Over the entire observation period, seven behaviours were manifest by the eight participants: request for attention; constant talk; babble; screaming; aimless walking; inappropriate disrobing; and verbal aggression, for example cursing. However, over 70 per cent of the observations revealed that the residents were not engaged in any BoC. The most frequently observed behaviours were babbling (8.7 per cent) and aimless walking (8.2 per cent). No physically aggressive behaviours were manifest during the observation periods (see Table 7.3).

Table 7.3: Frequency of Observed Behaviours

Behaviour	Frequency of behaviour	Per cent of behaviour
No unusual behaviour	138	70.8
Requests attention	5	2.6
Constant talk	10	5.1
Babble	17	8.7
Screaming	6	3.1
Aimless walking	16	8.2
Disrobe inappropriately	1	0.5
Verbal aggression	2	1.0
Total	195	100.0

7.2.3 Time of Behaviours

Interestingly, there were some patterns in the timing of behaviours. For those residents who engaged in aimless walking, 25 per cent of observed behaviours occurred between 1500 and 1600hrs with 50 per cent between 1600 and 1700hrs. These results also found that nineteen per cent of aimless wandering occurred between 0800 and 0900hrs. However, according to a Chi Square analysis of time *versus* behaviour these results were not statistically significant $\chi^2(98, n=195) = 85.964, p \leq 0.05$.

Only one of the residents engaged in screaming, 66.6 per cent of which occurred between 1500 and 1700hrs. The correlation of time of day and screaming was not statistically significant.

7.2.4 Staff Presence and Manifestation of Behaviours

Of the 57 observed behaviours, 40 (70 per cent) occurred when there was no staff present. For example, four of the five observed requests for attention occurred when the resident was alone. The association between staff presence and occurrence of behaviours was statistically significant with the frequency of all

behaviours decreasing when a staff member was in the room with the resident $\chi^2(21, n=195) = 63.997, p \leq 0.005$. In fact, as the number of staff increased the number of behaviours decreased (see Table 7.4). When one staff member was in attendance with the resident, babbling decreased to 33 per cent and requests for attention decreased to 25 per cent (see Table 7.4).

Table 7.4: Staff Presence and Manifestation of Behaviours

Behaviour		N° of staff present				Total behaviours
		0	1	2	5	
	No unusual behaviour	122	14	1	1	138
Verbally agitated	Babble	12	4	1	0	17
Physically non-aggressive	Aimless walking	10	4	1	1	16
Verbally agitated	Constant talk	7	2	1	0	10
Verbally agitated	Screaming	6	0	0	0	6
Verbally agitated	Requests attention	4	1	0	0	5
Aggressive	Verbal aggression	1	0	1	0	2
Physically non-aggressive	Disrobe inappropriately	0	0	1	0	1
Aggressive	Physical aggression	0	0	0	0	0
Total		162	25	6	2	195

7.2.5 Resident Activity and Manifestation of Behaviours

A significant correlation was found between the variables resident activity and behaviour $\chi^2(77, n=195) = 246.978, p \leq 0.005$. Nearly half of the observations of no unusual behaviours occurred while residents were sleeping, which supports the choice of observational tool and adds to the validity of the results because it is unlikely that BoC occur while a resident is asleep. Two thirds of the observed

screaming (n=66.7 per cent) occurred while the resident was not engaged in any activity and 68.8 per cent of walking was considered aimless.

7.2.6 Resident Location and Manifestation of Behaviours

A significant correlation was also found between the variables resident location and behaviour $\chi^2(56, n=195) = 149.914, p \leq 0.005$. Nearly two thirds (n=60.1 per cent) of the observations of no unusual behaviours occurred while the residents were in bed. 'In bed' refers to the resident location and not the activity of sleep. Aimless walking was observed in 75 per cent of residents located in the corridor. One third of all babbling occurred in bed or at the nurses' station.

7.3 Summary

The aim of Phase 2 was to explore the incidence of physically aggressive behaviour in considerably more detail and, at a more micro-level, to seek an explanation of the findings that arose from Phase 1. The particular focus of Phase 2 was on determining the incidence of specific aggressive behaviours and examining the reporting practices of nurses and care staff.

Analysis of the data from the Facility X survey and the structured observation found that physically aggressive behaviours occurred infrequently in Facility X. This is consistent with the BoC survey findings.

The Facility X survey also found that the majority of staff would complete an incident report for the identified physically aggressive behaviours, but that this decision was influenced by the occurrence of staff or resident injury, the frequency and severity of the behaviour and the legal obligation to complete such documentation both for Occupational Health and Safety (OH&S) purposes and facility accreditation.

The next step in this study was to investigate further how and why physically aggressive behaviour was an issue of concern for nursing and care staff in Facility X. Early explorations of aggression in social and behavioural studies identified that the way we interpret aggression is varied and subjective (i.e. some behaviour can be considered instinctual and preservative while others can be considered uninstinctual and destructive) (Freud 1920; Dollard, Doob, Miller, Maurer and Sears 1939; Fromm 1973; Rummel 1977). Therefore, the most appropriate approach to explore how and why aggression was problematic for staff was to talk to the staff and obtain rich qualitative data through group discussions and interviews, and to look first-hand at what was actually occurring by undertaking a period of participant observation. Data obtained through these methods were used to determine how nursing and care staff understand and manage physically aggressive behaviours. These results will be discussed in Chapter 8.

Chapter 8

Phase 2: Staff Understanding and Management of Physically Aggressive Behaviour

Chapter 7 presented the findings from the quantitative aspects of Phase 2. These findings showed that physically aggressive behaviours occurred infrequently in Facility X. These findings concurred with those of Phase 1 in which physically aggressive behaviours were perceived to occur infrequently, but to have a high impact on nursing and care staff.

It was important then to determine how staff define, understand and manage aggressive behaviour because this may elucidate why the impact of the behaviour is so high. The particular focus of this chapter is on the questions:

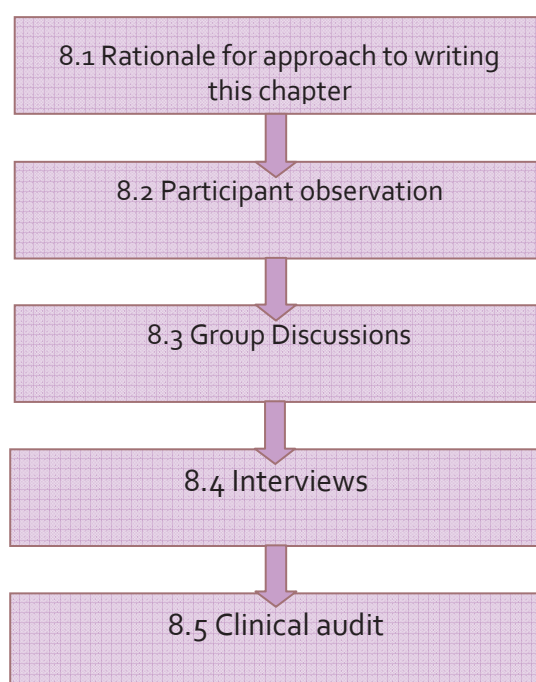
1. How are physically aggressive behaviours by residents with dementia understood by Registered Nurses, Enrolled Nurses and Personal Care Assistants employed within a Tasmanian aged care facility?
2. How do these understandings affect the strategies utilised by staff to manage residents' physically aggressive behaviours?

The reporting practices of nursing and care staff are also further explored in this chapter as they are also influenced by understanding of physically aggressive behaviour.

To answer these questions, data were collected by four methods: a substantial period of participant observation; two group discussions (one with Registered Nurses and Enrolled Nurses and the other with Personal Care Assistants); semi-structured interviews with two Registered Nurses; and a clinical

audit of Incident Reports submitted in Facility X involving the eight resident participants. The data collected using these four methods are presented in Chapter 8. The structure of Chapter 8 is shown in Figure 8.1.

Figure 8.1: Structure of Chapter 8



8.1 Rational for Approach to Writing this Chapter

The presentation of a mixed methods study deserves considerable thought, and should be informed by the underlying philosophical assumptions and the study design. In Phase 1 it was appropriate to present the data using the impersonal point of view in keeping with the ontological and epistemological position informing that Phase.

An ethnographic approach guided Phase 2. As such it was important to be ‘attentive to and conscious of the cultural, political, social, linguistic, and ideological origin of one’s own perspective and voice as well as the voice of those

one interviews and those to whom one reports (Patton 2002:65)'. Writing in the first person communicates the researcher's self-awareness and role in the study. Hence the data in Chapter 8 are presented in the first person. This is in keeping with the ethnographic approach and constructivist paradigm (Webb 1992; Creswell and Plano Clark 2007).

8.2 Participant Observation

Participant observation was an important data collection method. It is presented here to provide a descriptive account of the environment in Facility X, and to provide a context in which to situate the data that follows.

8.2.1 Entering the Field

Gaining access to Facility X was facilitated by the DON (the gatekeeper) who I had worked with on previous research projects. My access was also aided by the nursing shortage, and so when I took up a casual position as a Registered Nurse within facility X, no questions were asked. Working as a Registered Nurse in the facility enabled me to become known and trusted by the participants. Being known and trusted by the participants would later enable me to obtain rich and valid information during the interviews and group discussions (Norman and Parker 1990).

8.2.2 Setting the Scene

Facility X had implemented a low stimulus environment as a strategy to prevent and manage BoC. This assumption is based on a theory that too much noise or activity overstimulates a person with dementia, which may at times result in catastrophic behaviour (Hall and Buckwater 1987; Nelson 1995; Kovach 2002)

(see Section 3.3.2.3). The low stimulus environment in Facility X comprised one room without a television or radio. The room was furnished with recliner chairs. It could be described as a sunroom with bay windows on one side. In it, there was a fish tank. Residents were relocated to this room when staff considered them to be over-stimulated; a sort of ‘time-out’ approach. Following my first visit to the facility, I documented the following description of Facility X:

The walls in the corridor of the wing were painted dusky pink. The floors are carpeted, also in a dusky pink. There are old-fashioned pendant lights hanging from the ceiling. The lighting is dim. There are no obvious smells. I can hear the television loudly from the dining room – the Australian Open Tennis Championship is being broadcast. In the distance, I could hear a lady screaming out ‘Help, Help! Nurse! Help!’ I do not see anyone hurrying to her assistance.

An old-fashioned ice cream trolley is wheeled along the corridor by an elderly volunteer. It is painted white and has large wheels. There is only one flavour of ice cream: vanilla. The residents seem to appreciate the ice cream, as it is a very hot day.

I worked with another Registered Nurse for the first two shifts to learn the routine of the wing. My nursing background was surgical and perioperative. Therefore, I was immediately struck by what I considered limited information delivered during the handover process in aged care, the need for the oncoming Registered Nurse to repeat the handover to the oncoming Personal Care Assistants (why could the Registered Nurse and Personal Care Assistants not have this at the same time?), the confusion over the number of bells and alarms that were heard, the workload, the lack of what I considered essential equipment, such as suction, oxygen and crash cart, and mostly by the noise of both the staff and the residents. My orientation was very brief, I struggled to distinguish one resident from another, relying heavily on the Personal Care Assistants to identify residents. It was not until several weeks later, at my request, that I was orientated to the fire evacuation procedures and the location of the suction equipment (it was under a

table covered by a floor length tablecloth, outside the nurses' station, and was older than any piece of equipment I had ever seen!).

I discovered that my role was primarily that of administering medication. Each morning or evening shift I worked with either another Registered Nurse or an endorsed Enrolled Nurse. Together we administered medications to all of the residents on our wing. The medications were housed in large silver trolleys. Each resident had their particular medications allocated into Webster Packs. Many of the residents had their medications crushed and mixed in jam. During these medication rounds, I assisted residents with nebulisers, rubbed in creams for arthritis, and administered creams and solutions for thrush. I completed two full medication rounds each evening. There was just enough time to have a cup of tea between each round. During the morning shifts, I was responsible for changing all of the dressings on my half of the wing. The dressings were mostly for skin tears and leg ulcers. Any spare time was spent writing notes in the residents' clinical records or phoning doctors to request new medication charts. I considered myself very busy.

When I worked night shifts, I discovered my role was not medication administration, rather it was to correctly dispense continence aids from the storeroom for every resident on the wing. Each resident had a plastic bag with his or her room number on it. My job was to place the correct continence pads into each bag, and put them back into the resident's room. Come morning, I measured blood glucose levels and administered insulin before giving handover to the oncoming nurses.

8.2.3 Sherry

Night shifts suited my parenting obligations, so I often worked nights over the weekends. I arrived late one night in March. Most of the residents were already in bed. However, one female resident was still requiring assistance. I documented her encounter with the evening nursing staff.

A small lady walking with a frame came to the nurses' station asking for a glass of sherry. Over the time I had worked in Facility X I had noticed that some staff gave her three quarters of a drinking glass filled with sherry. Others gave her half a glass, while another group of staff diluted her sherry with water.

This night she had come to ask for a second glass of sherry. The RN who had worked the late shift told her, 'no – you have already had your sherry for tonight'. I wondered who had given the sherry, and how much. When the lady did not believe she had had her sherry, the RN shows her the empty sherry bottle. The resident seemed to accept this and walked away.

A quick glance around the nurses' station revealed a second sherry bottle, with only a small amount missing. It seemed wrong to trick the resident. The RN justified her approach stating that the lady was considered a 'falls risk' when she drinks more than her allocated one nip of sherry.

I discussed this incident with my academic supervisor later that week. I was concerned that the staff were contributing to the resident's confusion, and depriving her of a nightcap, which she obviously enjoyed. This incident raised questions for me. I understood that alcohol consumption could increase her risk of falling, but in my experiences to date in Facility X, residents were 'allowed' to wander. They were 'allowed' to smoke cigarettes. I could not understand how sometimes this resident was 'allowed' a sherry, and sometimes she was not.

8.2.4 Phlegm

I frequently worked night shifts. While I enjoyed the autonomy of being the only Registered Nurse on the shift, I still found the nights lonely, tiring and very frustrating. This frustration is evident from this from my field notes.

Night duty. I am pregnant, tired and very frustrated. I am still caught by the desire to make the residents better and to remove their pain. I am a recovery nurse.

I am working with two PCAs. In the other wing, at the other end of the facility is an EN and another PCA. I am the only RN for over 100 residents.

Resident A has a very productive cough. She sounds like she is drowning in sputum – and as usual is screaming out ‘help, help’. I go into her room. She has rolled and become lodged between the mattress and bed rails. She is gurgling. She is too big for me to move.

I can’t find the carers in our wing. I need them to help me move Resident A. There of course is no suction equipment in the room. I am anxious. I remembered the pre-historic glass suction device hidden under a table near the nurses’ station. There was no point going to get it, as I didn’t know how to use it.

I spend 20 minutes looking for the PCAs. Eventually I go to the other wing. I find my PCAs sitting and having coffee and chips with the EN and PCA from the North Wing.

I am speechless with anger and disbelief. They calmly look up and inquire ‘would you like a chip?’ I am curt stating I need assistance immediately. They finish their drinks and join me on the walk back to our wing.

Together we turn and reposition Resident A. I percuss her back, helping her expectorate the phlegm. The PCAs have to leave the room, as they can’t stomach the spitting and coughing. I am dry retching from the phlegm and the morning sickness.

Eventually I settle Resident A back in her bed. She sleeps. I reflect on ‘being an aged care nurse’.

Being an aged care nurse was quite different from being an acute care nurse. I was struggling with the dominant medical paradigm that always drove us to find a cure. Clearly, this was not the goal in aged care. I was also struggling with delegating aspects of care to Personal Care Assistants. I was uncertain if they would carry out my request in the manner specified.

8.2.5 An Aggressive Incident

My concerns around the delegation of care to Personal Care Assistants and lack of confidence in their ability to process the rationale behind that care seemed justified after an incident with Resident X. This incident occurred during my visit to Facility X to read the resident participant’s clinical notes. The incident unfolded as follows.

Resident X had a nasty fall on the 25th of October 2005 (1500hrs) having slipped on the floor where she had been incontinent of faeces and urine. The nursing notes reported she had been very physically and verbally aggressive to staff trying to assist her. She had sustained large skin tears to her hands, ankle and scalp. They had been unable to apply dressings, as Resident X had been 'non-compliant'. The RN had earlier mentioned this incident to me, telling a similar story, but adding Resident X had been covered in blood, mainly from the scalp wound, which bled profusely. She had managed to slip an ice pack into Resident X's pillow as they were aiding her to bed, which halted the bleeding. This explains the rather loose crepe bandage hanging from Resident X's leg yesterday afternoon. The following day (26/10/05) the notes reported Resident X had spent the day sleeping, waking only for meals. She was 'non-compliant with toileting regime or wearing a continence pad'. The next day (27/10/05) Resident X was reviewed by her GP who prescribed antibiotics for an UTI. Staff reported in the nursing notes they were unable to review Resident X's wounds, as she was very aggressive (30/10/05).

This incident demonstrated to me that there was cause for concern around the delivery of care, and identified how communication breakdown in a facility of this size had serious ramifications for resident care. A full recount of the incident is presented in Appendix J.

At this stage, I became acutely aware of how my education and previous nursing experience was colouring my perceptions of nursing in the aged care sector. To refocus and acknowledge the effect of my personal characteristics I removed myself from the setting and engaged in conversations and reflection with my academic supervisors and colleagues.

On return to the setting, and after I was known to the staff participants as both a Registered Nurse and a researcher, I was able to initiate the other data collection strategies.

8.3 Group Discussions

Participant observation provided a description of the context in which resident physically aggressive behaviours are managed. Consistent with the methodology, the data from the Group Discussions is presented next. This data provides the nursing and care staffs' perspectives and understandings of the residents' physically aggressive behaviours. Two group discussions were held in Facility X. Data from the Registered Nurse/EN group are presented first followed with that from the Personal Care Assistant group.

8.3.1 Registered Nurse/EN Group Discussion

The group discussion held with the Registered Nurses and one Enrolled Nurse commenced in a similar manner to the many ward meetings I had attended. It seemed to me that the participants considered it an opportunity to debrief and discuss the challenges of managing resident behaviours that they faced on a daily bases. Their conversation revealed that behaviour management was a very real issue. This was demonstrated by RN1 comment where she stated:

Obviously all of our residents have one behaviour or another, but some are much easier to deal with.

It was clear from this discussion that one resident in particular was consuming a large proportion of their time, particularly in relation to behaviour management.

RN1: 'We have behaviours with all our residents no doubt, in varying degrees. But, his behaviours bring out a situation that needs manpower.'

RN2: 'We talk about it at handover, we talk about it at morning tea and at lunch. 50 per cent of our conversation at the tea room is about discussion what we can do with this gentleman.'

The impact of one resident with difficult to manage behaviours was high and considerable time was spent by the staff in developing management strategies for this patient.

You know, we do sit down and think. Is there a possibility that we can think of a solution that will help us out in any way? We have sat and talked about a single room and discussed if that would help. But the fact is he is still mobile and once he gets a bee in his bonnet he will go out seeking and wandering.

The 'seeking and wandering' behaviour belonged to a man that I had cared for while a Registered Nurse myself in the facility. I had observed him becoming verbally aggressive to the kitchen staff over his evening meal. I had watched as the nursing staff had attempted to intervene. 'Meals seem to be the trigger for him' said one of the Registered Nurses. He continued to explain how he tried to manage this situation:

I try to get out of the dining room before they bring his meal, because I know he's going to bite. For some reason I suppose there is always a Bogan in uniform with a trolley and so therefore he assumes that person is responsible. So he lines me up and I have to get out of there.

The group discussed how they had initiated strategies to manage meal time behaviours. These strategies included incorporating the diversional therapy staff:

Meal times – it's been the therapy staff that have done it all during the week. But, you have a lot of problems during the weekend. It is when the care staff don't know [how to manage the behaviours]. ... We need to get the care staff to be able to serve him the same way [as the diversional therapists].

The group had identified that the resident needed assistance and that assistance needed to be consistent for all meals. They also identified that he needed one-to-one care:

He needs one-to-one. If you have got one-to-one you can talk about travelling and the war of Italy and he forgets all of the food. He gushes

down whatever is on the plate as he is talking about Italy, But he needs someone that has the time to stay with him for a while.

The group continued to contemplate the management of the man's behaviours. From the conversation, I sensed that they understood how to manage these behaviours, but that they did not have the time or workforce to do so. In fact, RN2 stated clearly that 'manpower is not something we always have in abundance'. Moreover, I sensed that they considered the residents as people with past lives rather than only patients requiring care:

RN 2: 'He's a very good pianist. Teaches music.'

RN1: 'He doesn't come across as a person who has lived a very physical life. He comes across as a gentleman. But then he gets a bee in his bonnet and he is so adamant he is going to give him one!'

In this statement, RN1 was referring to the resident wanting to punch another resident.

The group also discussed the female residents in the facility, stating that the 'women are more physical'. RN1 gave the example of a female resident:

RN1: A couple of the ladies on our end will bring the staff running. You will hear a scream and you think 'Oh God they have fallen' You go down there and will find that the carers are washing her bottom.

This screaming was subsequently rationalised by RN2:

RN2: It's very intimate touching and stuff. They don't understand what's going on. Some of these people have had some pretty horrendous experiences.

As a group, they also rationalised other behaviours:

One of my ladies today has been very resistive to care. But, she has had two nights of sleep interruption because the lady beside her has been awake all night. I can understand. I can put myself in her shoes. If I had been kept awake for two nights running, dementia or no dementia – I am going to be stropky!

This group of nurses clearly understood that the residents were people with past lives, that they were subjected to invasive, intimate body care, were

sleep deprived and that they had dementia. This was a holistic understanding of physically aggressive behaviours.

This understanding of dementia was underpinned by their observation and interpretation of the behaviours. They described ‘monitoring their deterioration and their behaviours’. They then associated these observations with their understandings of dementia. For example:

Some dementias stay the same. The alcohol dementias tend to stay the same. The Alzheimer’s will progress.

These observations included conducting mini-mental assessments (see Chapter 2).

We do a mini-mental sometimes. We are not allowed to diagnose, but we can say they have behavioural problems or short-term memory loss, or that they get confused. But, we can’t say a person has dementia unless they have got a medical summary with dementia stated on it.

It was clear that the nurses made a distinction between dementia and the normal ageing process:

You have to be very careful. People tend to say that ‘such and such has got dementia’ and they actually haven’t. They have just got your normal ageing process, and some have simply got short-term memory loss. They are just lumping everybody into the same basket.

Further, they were aware of the differences between dementia behaviours and stubborn personalities:

Because personalities in your frail aged – you just may get someone who is stubborn – but that is not a behaviour!

This conversation led into a discussion of the issues faced by nursing staff in relation to the lack of diagnosis referred to in Chapter 2, Section 2.2.4 ‘I think it helps to know’ a diagnosis, RN2 stated. He continued:

It helps to anticipate what’s happening. If they are Alzheimer’s – at feeding times when their clothes are getting too small – you need to know they are Alzheimer’s. Because then you let them keep eating tons, because you know the next thing will be that they stop eating. You can understand that in dementia with Lewy bodies – well that is why they

are screaming. It is because they are having vivid visual hallucinations. I think it is important.

Clearly the absence of a formal diagnosis was problematic to the nursing staff.

It was apparent from these group discussions that the Registered Nurses relied on a diagnosis because understanding the symptoms and behaviours enabled them to ‘monitor a resident’s deterioration’, thereby informing their care practice. By observing changes in symptoms and behaviours and by being aware that the behaviours ‘keep morphing’ as the disease progresses, the Registered Nurses assessed and planned care. For example, in discussing the alterations in Resident B behaviours, the Registered Nurses concluded that he had a ‘multi-infarct dementia’, and associated this working diagnosis with other residents who were considered ‘typical personality changers’. As a full-time staff member, the RN1 considered she had an advantage over the part-time staff because she had the time and opportunity to ‘notice and pick up on things that [part-time staff] may take for granted’. Patient observation was an important skill for planning resident care. To overcome this absence of a formal diagnosis, the Registered Nurses reported that they made an informal diagnosis based on the symptomatology and their observation of the residents.

It was evident that the Registered Nurses also were aware of the benefits and pitfalls associated with the use of chemical restraints. In general, the risk management approach adopted by the facility prescribed the limited use of medications because as one Registered Nurse said ‘the risks often outweigh the benefits’.

8.3.2 Personal Care Assistant Group Discussion

Two of the three Personal Care Assistant participants came to Facility X on their day off specifically to attend the group discussion. The third Personal Care Assistant attended the group discussion at the end of her morning shift. As an icebreaker, I asked the group to describe what kept them working in Facility X. One participant responded ‘I need a job, I need the money’, but the others spoke of how rewarding they found the work.

PCA 2: ‘I think the thing that keeps us coming back is the support from the staff... It is very rewarding’.

PCA 3: ‘I love it. I love it. I just like coming to work!’

The concept that the work was very rewarding was reiterated by PCA3, when he said:

PCA3: I get a lot of satisfaction out of it. I love what I do. You do get your days when you think Christ! But, if you have bad days with people with dementia – I don’t blame them – I blame myself and say well I must have done something or I just didn’t handle it right. I’m smarter if I can work out what I did wrong.

Interestingly, PCA3 stated that the ‘TAFE course was useless’ and that it had not helped him in working out ‘what he did wrong’. PCA2 agreed with this stating that the TAFE Certificate III course (see Section 4.3.3) was ‘just a text book course’.

There was agreement among the group that to provide care to people with dementia they needed to accept that the residents were not accountable for their behaviours:

PCA3: ‘You accept that a lot of the people have dementia and that they are not really accountable for their actions.’

PCA2: ‘We understand that that is the way they are.’

PCA3: ‘I don’t think it is hard ... once you get it into your head that they are not accountable, and they don’t know what they are doing.’

The comment from PCA3 that ‘they don’t know what they are doing’ highlights the tension between his understanding that the residents with dementia are not accountable for their actions, and his concern that he had done something wrong or had in some way contributed to the residents’ behaviour.

The tension around understanding dementia was also evident in the understanding of behaviours. For example, PCA3 commented on the behaviour and personality of a male resident:

PCA3: I can’t stand him. I just can’t stand him. All the things I’ve said about acceptances [of behaviours] but he’s rude, one of the rudest people I’ve ever met in my life. He even touches the ladies up! He uses foul language – I mean honestly!

In this comment, it is evident that offensive behaviour from the residents was considered uncivilised and deviant because they transgressed social norms. Moreover, the comment is suggestive that PCA3 considered the offensive behaviour to be intentional, and that it could not be excused or tolerated as a symptom of dementia

The discussion continued with a focus on caring for the residents who had dementia. I asked the Personal Care Assistants what was the hardest part of their job. In response to this question, the Personal Care Assistants spoke of caring for people with dementia, and the relationships they formed with the residents.

These relationships developed because of the ‘hands on’ role of the Personal Care Assistant through which they provide ‘basic care’ to the residents (see Chapter 4). The consequence of this ‘hands on’ role was that they had the time and opportunity to develop a more social relationship with the residents. PCA2 described this relationship:

Once I got to know the residents I got to really like them ...and they gradually start to grow on you. Some you will like more than others. You will have your special ones.

The Personal Care Assistants explained that having ‘special ones’ meant they had become ‘attached to people’ and therefore did not mind doing extra tasks for them:

PCA3: I just bought Mrs. Y. a writing pad. I’ve been doing it for 18 months because she can’t. She thinks I am a saint ‘cause I got her a writing pad you know. For a few minutes in her life I have made her happy – made her smile. That is where you get that satisfaction.

It was important for PCA3 to be liked by the residents, to be a ‘saint’. Similarly, PCA1 described how she did not mind spending extra time with one of the female residents:

PCA1: I had a lady that was the most sweetheart. I was in there for 40 minutes between 7 and 8. I had four ressesies that I had to have up and this poor lady she was taking up all of my time. And it was like ‘you poor thing – you never ask for anything’. And I thought to hell with the rest of it. I just had to spend that time with her. ‘Cause who else will?

Generosity and empathy aside, these comments clearly demonstrate the Personal Care Assistants’ misunderstanding of dementia because although both Personal Care Assistants perceived the residents to be happy, their dementia is such that they will not remember who provided the writing pad or the extra time in the shower.

Being liked by the residents was important to the Personal Care Assistants. This was demonstrated by a reflection shared by PCA3. He recounted an incident during which the manifestation of delusions and paranoia had a detrimental effect on the nursing and care staff in Facility X. He referred to a

verbally aggressive incident with Resident D who had accused him of inappropriate behaviour:

PCA3: I know I've done nothing wrong. But, every time it happened I have been lucky there has been another carer there with me. Just luck that's all, and every time she calls me a 'bald head old bastard'... it doesn't really upset me ... I've been around a long time now and heard things far worse than that.

He explained that his biggest concern was that Resident D's accusations were potentially damaging to his reputation and relationships with the other residents, in particular those residents who do not have dementia.

PCA3: The only way it affected me is that the other residents heard ... she was screaming, really screaming it out. The other ladies up there would definitely have heard.

Although here PCA3 is demonstrating an understanding of Resident D's behaviour, he later demonstrates his lay understanding of dementia by suggesting that by his repetitive actions he may be able to overcome Resident D's problems with memory loss and the inability to learn new things. He stated that:

I work on the principle that if I keep showing her I am a nice, decent person, then she might just accept that.

PCA3's comments demonstrate the tensions in his understanding of dementia and BoC. On one hand, he can rationalise Resident D's behaviours as a symptom of dementia, but on the other hand, he continues to try to teach her that he is a 'nice, decent person' seemingly oblivious to the fact that memory loss and inability to learn new things are key symptoms of dementia.

Therefore, the relationships the Personal Care Assistants formed with the residents clearly shaped their perceptions of the residents and therefore the way they delivered care. This was particularly evident when they discussed residents whose relatives did not visit. For example, PCA1 reflected on her experiences:

We are really looked upon as family. We have to give them more company. They look toward us for support.

These comments suggest the Personal Care Assistants understanding of dementia and behaviours is on a social and emotional level where their focus is on making the residents happy. This is further exemplified by PCA1's comments relating to Christmas:

Around Christmas time, sentimental and family oriented times – the residents tend to get a bit more depressed and you feel it. You just feel the vibes, and they sort of want to hold your hand and give you a hug. Or give you an extra kiss. You just wish sometimes you could take them all home for Christmas Dinner.

Although the group were discussing dementia and behaviours on a social and emotional level, they were still able to identify that the demographic of residents in Facility X was changing. This was articulated by PCA2 when she said:

I've noticed a lot has changed. Every day there would be a favourite in every room. And you just love them. The residents are different now...we see a lot more dementia.

This observation was supported by PCA3 who said:

Even in the short time I have been here I've noticed we seem to be getting either the worst cases or the ones that are more advanced. I've noticed the difference.

Moreover, the group clearly articulated that while they acknowledged their relationships with the residents, these relationships did not influence the way they documented resident behaviours.

PCA1: 'I would still document a behaviour no matter what!'

PCA2: 'The RNs need to know whether it is a pattern from week to week, don't they?'

The documentation of behaviours was considered an important aspect of their role, particularly in terms of maintaining the safety of their Personal Care Assistant colleagues:

And if the behaviour was something that could be dangerous for another carer coming on – I put it on the carer charts, and then it is known.

From the analysis of the transcripts from the group discussion held with the Personal Care Assistants, it is evident that this group find working in Facility X rewarding. The notion of being rewarded is based on the social understanding they have of dementia and resident behaviours. The Personal Care Assistants tolerate many of the residents' physically aggressive behaviours as they understand that the residents cannot be held accountable for the behaviours. Acknowledging the lack of intention on the part of the resident did not deter the carers from searching for an antecedent to the behaviour or apportioning blame to themselves.

Offensive behaviours such as foul language and 'touching the ladies up', regardless of dementia or perceived intent, were not tolerated by the Personal Care Assistants.

The Personal Care Assistants had formed social relationships with the residents, which contributed to their desire to be liked by the residents, and for them to engage in activities that pleased the residents or demonstrated their concern for the well-being of the residents (for example, extra time in the shower, shopping for note pads). This social relationship contributed to their understanding of dementia and their desire to show that they are 'decent people'. Regardless of their desire to please the residents, the group unanimously stated they would document resident behaviours that might put their Personal Care Assistant colleagues in a dangerous situation.

Thus, the Personal Care Assistants understood dementia and physically aggressive behaviours from a social and emotional perspective. Personal Care

Assistants' care practices were based on their social and emotional understanding of dementia and physically aggressive behaviours.

This understanding meant that providing care for people manifesting physically aggressive behaviour was just part of the job and that 'in this sort of environment you have to be prepared for that [physically aggressive behaviour]'. The Personal Care Assistants social relationships meant that they knew each resident and they were able to recognise a behaviour and think 'Oh well! Here it goes'. Although sometimes they had to remember the behaviour was associated with dementia and, as PCA1, stated 'to snap and think "oh look she has dementia" and all the rest of it' when a resident behaves in an upsetting way.

By knowing the residents, they were aware that the behaviours were intermittent and as PCA2 stated:

And in half an hour they will be totally different again. So you are back to that nice little person.

Their approach to the residents was to give them space or as PCA1 said 'to leave them to it':

PCA1: I try and laugh it off and have a bit of a joke about it. Like – she's off her tree for a few hours – then leave her to it. That's my way of dealing with thing. I do get worried and think 'Oh my God. You poor thing', but I try and laugh it off – to get over it.

However, the Personal Care Assistants acknowledged they 'wouldn't put up with it' if they worked in a different area such as an acute care hospital unless they were 'dealing with people with say Down's Syndrome or some mental disorder' where behaviours were excusable due to loss of cognitive function; similar to the dementing process occurring in the residents for whom they were caring.

In addition to the Personal Care Assistants being personally confronted and upset by the manifestation of aggressive behaviour from residents whom they described as ‘special’ and ‘sweetheart’, their comments also highlighted their non-professional response to the manifestation of aggressive behaviour. For example, the young and less experienced PCA2 voiced how she was upset because of PCA3’s experience with Resident D.

PCA2: It affected me ... I remember I was down there one day, and Resident D was yelling and screaming at PCA3 and I was there with another girl. I was upset to think that she [Resident D] was so nasty to PCA3. And I think ‘how could she say that?’

Similarly, PCA1 too was shocked:

It shocked the socks off me the night when PCA3 said ‘can you go down there? I can’t go down there [to D’s room]’. It shocked me ... it really upsets us.

As the Personal Care Assistants had developed social relationships with many of the residents, they were especially upset by the manifestation of offensive behaviours since they felt these behaviours were destructive and directed at them personally.

Being confronted by physically aggressive behaviour was also disruptive to the personal lives of the Personal Care Assistants. This is demonstrated by the negative effect one resident’s behaviour had on PCA2 in her description of a conversation she had with her husband following an incident with a resident who required sedation to prevent staff injury prior to the provision of hygiene care:

One night I was home doing the vegies for tea and I’d had this woman all day. Hubby just walked in and went flick just like that [hand gesture] and I just turned around and dropped him. And he’s big, 6 ft 2. I just said ‘I have been kicked and punched so many times today.’¹⁴ It scared him and it scared me.

¹⁴ It was not possible to clarify the incident that PCA2 referred to as this occurred prior to the period investigated and so was not picked up in the clinical audit.

This account graphically describes how repeatedly being assaulted by a resident can have serious ramifications for the personal life of care staff. Moreover, this kind of stress can potentially have implications for resident safety, as recognised by PCA2 when she reflected on her experiences of caring for one of the residents involved in this study:

If she [Resident G] is hurting you, your natural instinct, I mean you have a reaction to that. Sometimes a resident has grabbed me on the arm and I have turned around to hit – and then I thought ‘Oh no, I am not allowed to do that’. But, it is your natural reaction.

This same resident had bitten PCA3’s hand and had ‘tried to punch or bite one of the other carers’, a situation that PCA2 had found upsetting:

I think sometimes – I think come on – what’s going on here? What’s the story? And, I think ‘Jesus Christ! What is happening to me?’

PCA2’s non-professional background clearly influenced her attitude toward aggression. She apparently considered this behaviour as intentional (i.e. uninstinctual) and this appeared to contribute to her distress because she became personally offended by the unexpected behaviour of Resident G.

A sense of concern with the provision of appropriate care for those who did not have dementia was identified during the Personal Care Assistant group discussion. PCA2 explained that by providing care to a mixed population:

The ones that do have it upstairs a bit [maintained a level of cognitive function] – they get angry with the demented ones because they are coming up and singing in their ear or sitting on them or whatever. That is when they start fighting or getting angry. It does make it hard.

For example, PCA1 described a situation where they only provided hands on care to one resident after she had been sedated:

We had fifteen minutes. They’d [the Registered Nurses] have to give the injection and we had fifteen minutes to wash her, dress her, change her bed, and do whatever. That was it – just fifteen minutes! ...this woman was so feisty.

Although sedation was requested at times by the Personal Care Assistants, the absence of formal or substantive training undertaken by the Personal Care Assistants had implications for the way they understood the Registered Nurses' use of medications in the management of BoC. For example, PCA3 argued he did not 'really know what the drugs are', yet curiously he and PCA2 voiced their concern and disapproval of using sedating medications:

PCA2: 'Resident G wouldn't go to bed and they did give her something and I thought to myself 'mmm that's nice!' [Disapprovingly]. But I don't know the rules and regulations, I just thought to myself "night night!"'

PCA3: 'There is probably a difference between giving someone a sleeping pill or you know a sleeping fluid to using chemical restraint. But, basically it's just the same thing.'

Clearly PCA3 had little pharmacological knowledge, but he could understand that regardless of the route of administration, sedating medications all had the same effect, the effect being sending the resident to sleep, or as referred to by PCA2 'night night!'

8.4 Interviews

The intent of the semi-structured interviews was to elicit information from the two Registered Nurses who managed the delivery of nursing care to the residents with dementia, including this study's resident participants. I felt that their perspective would contribute to the study, as it would be different from that of the nurses whose role was primarily to plan and deliver care to the residents. I had assumed that the practice of the NUM and DON would be managerial, for the most part, and therefore somewhat removed from the 'coalface'. This was important in terms of exploring how dementia and physically aggressive behaviours are understood at a managerial level.

8.4.1 Interview with the DON

During my interview with the DON, I raised the issue that the residents did not have a formal diagnosis of dementia recorded in their clinical notes. The DON agreed with comments made by the Registered Nurses that knowing a diagnosis made planning care much easier. The DON demonstrated this point by referring to Mr. Y as ‘vascular’ because of his behaviour:

It certainly makes a big difference to care because you should know [the diagnosis]. Your vasculars – they will be your problem. Mr. Y here at the moment. He’s wandering, he articulates ‘don’t put that shirt on me’. He accuses us of all sorts of things. He’s vascular.

In this account, the DON has made a clear association between Mr. Y’s behaviour and her informal diagnosis of vascular dementia based on her understanding of the various types of dementia and associated symptomatology (Bathgate, Snowden et al. 2001). Clearly, this process then influenced the way she planned and managed Mr. Y’s care. The following comment explicates her understanding of residents’ behaviours in relation to their diagnosis:

So if you know [the diagnosis], then at 4.00pm you can start walking him to tire him out, or playing card game.

Throughout the course of our interview, the DON’s comments reflected that her understandings of dementia were well informed. She discussed how vascular dementia had various other manifestations:

Vasculars are purposeful wanderers – they’ll either be going home or going to Hobart.

In the course of our discussion, the DON used language such as ‘vasculars’ and ‘aggressives’ as a way to generalise her descriptions of the residents. However, she was acutely aware that these were labels as she said ‘I realise that I am giving them labels’.

The DON's understanding of her observations allowed her to predict behaviours and plan management strategies. The DON also spoke of residents who she described as having the most common form of dementia, Alzheimer's disease:

Your Alzheimer's will tend to sit. Your Alzheimer's don't seem to know what day it is, or what time, and they don't seem particularly worried by stimuli.

Here the DON is describing in a practical way several of the well recognised symptoms of Alzheimer's disease, particularly memory loss and wandering (see Section 2.3.1).

This facility had adopted a risk management approach whereby they provided care for residents without the use of physical (secure unit, locked doors, Posey vests, bed rails) or chemical restraints (antipsychotics, sedatives). The DON said 'I've got a policy that says I'm into risk'. On admission, families of the residents were informed that where possible, residents would not be sedated or restrained. I asked the DON about a wandering male resident. Staff managed his wandering by recording what he was wearing each day so he could be easily identified when the police or ambulance service found him. The DON confirmed that this resident often wandered, and argued:

We can't detain the residents here. The police bring them back, they go berserk at us. Well we can't detain them. The police should know that.

The DON recognised their risk management of dementia raised a number of extremely difficult ethical issues facing the aged care sector, health care providers, policy makers and relatives of people with dementia needing residential care. RACF staff are faced with a choice between unsafe wandering and aggressive behaviours or the use of physical and chemical restraints, a

situation that the DON felt would only be clarified when ‘nurses start investigating risk management for people with dementia’.

The DON’s comments also reflect her concern that the management and provision of care to older people with dementia is bound by moral and ethical dilemmas and that because of conservative risk management practices adopted by most RACFs, decision-making regarding management of BoC was gradually being outsourced to Allied Health professionals, which she felt reflected badly on the knowledge base and assessment skills of aged care nurses.

We will have speech pathology coming in, following us around ...
coming in to validate what nurses are doing.

The DON claimed that swallowing and speech assessments were being conducted by speech pathologists and resident mobility was now being evaluated by occupational therapists and physiotherapists.

The DON’s frustration was also evident when she spoke of the complicated funding arrangements in residential aged care. As dementia is listed as a mental illness in the Diagnostic and Statistical Manual of Mental Disorders, the DSM IV, additional resources and funding were available by accessing State funded mental health practitioners through the Dementia Support Unit (DSU). However, in order to access this support, the DON had to document that the Registered Nurses had been unable to manage the BoC exhibited by a particular resident effectively. In these circumstances, assistance would be available from DSU staff.

However, utilising DSU services proved to be problematic in relation to the facility’s risk management approach. The DON suggested that the DSU approach was not viable because of two key factors. Firstly, in Facility X one-to-

one care was not sustainable. Secondly, the DSU advised sedating medications, which did not fit with Facility X's risk management approach. She stated that the:

DSU don't provide other strategies other than one-to-one care or medication. Will we medicate? No!

The DON argued against this conservative risk management of BoC stating that in her opinion wandering and/or aggressive residents would be 'sedated to the eyeballs' to ensure their safety and the safety of care staff. Medication to sedate residents constitutes chemical restraint. The DON eschewed the use of sedating medications and few of the participants were administered sedating medications as a behaviour management strategy.

Providing care to a mixed population created difficulties when it came to the organisation of activities and social events, particularly as many of those residents with dementia could at times be prone to over-stimulation, which was an antecedent to agitated and aggressive behaviour. This conundrum was recognised by the NUM who argued the only way to determine if individual residents would be at risk of over-stimulation and exhaustion by participating in an activity, which may result in the manifestation of BoC, was to conduct individual behavioural and cognitive assessments. However, regular assessment was not possible because the DON stated that the facility had insufficient numbers of appropriately skilled staff:

If I had skilled staff I wouldn't have to say no to activities. I would say 'daily assessments', see how the residents are today, and then deliver the appropriate care and activities.

This situation was also highlighted by the DON who identified that limited activity was problematic for some residents. She argued that although she was 'pressured politically' by accreditation bodies to arrange activities for the residents, stimulating activity was probably best used for the very early

dementias, prior to their coming to live in aged care. The DON argued that ‘in nursing homes now you will either get middle or very late stage dementias, and it is certainly not the time for whipping them down for concerts!’ Holidays and other festivities compounded the situation because, despite the consequences, the DON argued, there were some staff who ‘think it is inequitable for me to shut down Christmas for some and not others’. She reported that despite the low stimulus policy, some staff would still take residents to activities. These comments highlight the resistance to the low stimulus environment and lack of understanding of BoC by some of the care staff. Similar to staffs’ variable adherence to the risk management approach adopted by Facility X, the above comments suggest variable adherence to complying with the low stimulus environment.

The DON recognised that pharmacological management of BoC was inevitable in the acute care setting, and although she did not agree with sedating residents, she explained to me that ‘You can’t blame acute care. Acute care have to do that [sedate people]’. Yet she argued this practice caused concerns for the RACF. Residents transferred from hospitals under the guise of ‘pleasantly dementing’ were in reality considered difficult when the behaviour masking medications were ceased. In the case of one new resident, she recounted:

We’ve got him now and he’s up and around. He’s wandering. He’s down the street getting brought back by the police.

She highlighted her dilemma when she said:

The reality is – would he rather be sedated with a feeder tube or wandering albeit unsafely in and out of the facility?

Here the DON raises a key tension between a focus on resident safety and the use of restraints, and issues around quality of life. This comment from the

DON again highlighted the risk management approach of the facility in which chemical and physical restraints are considered only as a last resort for managing residents' BoC. Her comment also enforces the reasoning behind the risk management approach, reasoning based in moral and ethical beliefs that promote quality of life, albeit over resident safety.

8.4.2 Interview with the NUM

A commonly held perception by the Registered Nurses (including the NUM) in this facility was that the Personal Care Assistants had an insufficient knowledge base, which led to an inappropriate response to physically aggressive behaviour. This was reflected in the NUM's comments during our interview when she argued that at times the Personal Care Assistants mismanaged aggressive behaviour because they approached residents incorrectly. For example, by not knowing when to '*step back*' and reapproach a resident later. She said:

Probably 99 per cent of the time aggressive behaviour is the result of poor management from staff [the Personal Care Assistants] who don't really know what to do or who are unable to step back and say 'well I have over stepped the mark.

Importantly, the NUM argued that the manifestation of aggressive behaviour was often avoidable simply by staff reprioritising their tasks, but recognised this was difficult because the delivery of care by Personal Care Assistants remains task driven. She said:

I think it is so ingrained in them that they must have this and this done by this time [the completion of tasks] that it is really hard for them to let someone stay in bed [rather than thinking] if they don't want to get up, it's OK.

The NUM was able to clearly articulate that there was a specific cohort of care staff who were more difficult to manage:

The ones I find difficult are the ones who have been here since 1992 and they have come from the hospital stream, and they are the ones who are very, very set in their ways and very difficult to try and change. It is those who are so set in their ways – ‘you will have your shower today’ and ‘you will do it at this time’. And that is the way it is done. We have got a few of those, but slowly but surely we are weeding them out I suppose.

As part of the ‘weeding out’ process, the NUM explained how she had identified some of the carers who were not interested in understanding dementia.

The ones who aren’t really interested and who don’t know what else to do with their lives. They won’t think at all. They are the ones we have pushed into the EN course. Because they are the ones who don’t understand behaviours, or think it is not their responsibilities. The change in their behaviour is just six months has been tremendous. They are now saying ‘Oh that’s why he did that’ and ‘Oh, that’s why you can’t do that’. I think that now they will begin to see that for all the years they have been management bashing, and RN and EN bashing. I think they are now starting to realise.

Here, the NUM has described how some of the Personal Care Assistants working in Facility X had not been interested in understanding resident behaviours. As a way to educate the carers, she had encouraged them to undertake the enrolled course through the TAFE system. She reported that in just six months, she was seeing an improvement in both attitude and knowledge.

Further reflective of her concerns about the Personal Care Assistants, the NUM argued that the Personal Care Assistants held a lay perception of dementia and attitude toward aggression resulted in their thinking the residents were at times ‘down-right naughty and stubborn’. This misunderstanding created problems because as the NUM argued the Personal Care Assistants ‘can’t help reacting to the dementia’, and respond inappropriately by treating residents as children for example, scolding them for aggressive behaviour.

While the responsibility of Personal Care Assistants care practices lays with the NUM, this situation suggests that the hierarchical nursing and care staff

structure within Facility X the Personal Care Assistants feel pressured to complete tasks that might be left until later in a shift. Certainly working as a Registered Nurse within this facility I was aware of the cultural imperative to get things done and of the horizontal violence, albeit at a low level, directed toward staff members who had not completed their allocated work. The NUM reported that they would only consider the pharmacological management of BoC if both these approaches were unsuccessful.

The NUM agreed with the risk management approach adopted by the Facility when she stated:

Even with the risks faced by our wanderers I still think it is much nicer for them to be able to wander if they want to. Ninety nine per cent of them are happy to go and come back. They are not even aware of where they are. You take that risk, but in the long-term I think they are a lot happier.

The NUM reported that they would only consider the pharmacological management of BoC if both these approaches were unsuccessful.

I then asked about the management strategies she found most appropriate for managing aggressive behaviours. She responded ‘a lot of things ... quiet music is helpful’. As part of the low stimulus environment, the NUM regularly instructed staff to remember they worked in a low stimulus environment and to work quietly. She explained that:

With an overall sense of peace the residents are quiet and calm and the staff manage the behaviours better because they are calm and quiet too.

However, the NUM was cognisant that many of the staff found working in a low stimulus environment very difficult. She explained that:

A lot of people find it really hard because of the low stimulus. I try to educate the staff because most of our old people are not used to loud music and things like that.

The NUM, knowing the increased risks of many medications prescribed to elderly residents (Trehan 1998) including the increased risk of falls (Corrigan 1989; Knopman and Sawyer-DeMaris 1990) said the residents in the study facility were on ‘very limited medications [arguing] why overload them to the point where they are at a risk of falling?’(see Section 3.3.1). She continued to explain that:

Even with the risk of all the wanderers, I think it is much nicer for them to be able to wander if they want to...rather than trying to keep them sedated.

The tensions surrounding the pharmacological management of physically aggressive behaviour were highlighted by an incident described by the NUM involving Resident G. She said that resident G was ‘so medicated she was sleeping all day simply because the staff had said she was aggressive’. This level of sedation was unacceptable for the NUM who ‘gradually weaned her back a little bit of what she was on’ and went on to state subsequently she ‘tackled the GP when he next came in’. However, it was evident that implementing a risk management approach that limited the use of sedating medications in the facility was a difficult process because, as the NUM explained, the doctors resisted their requests not to overmedicate the residents. This became immediately evident when the NUM commented that one particular doctor was now avoiding her and said ‘he knows to come in when I am not here. He comes at weekends or late at night’.

From these interviews it was evident that the DON and NUM held similar views in relation to their understanding and subsequent care of residents who exhibit physically aggressive behaviours.

8.5 Clinical Audit of Incident Reports

The audit of the residents' clinical records highlighted that none of the resident participants in this study had been assessed according to the diagnostic process suggested by leading gerontologists to diagnose dementia formally (Pond and Brodaty 2004). Not one of the participants had a formal diagnosis of dementia recorded in their clinical notes.

The audit of incident reports filed between January 2004 and August 2005 inclusive produced 281 reports. Of these, nineteen reports documented incidents involving the resident participants in this study. Physically aggressive incidents were recorded in four reports. The physically aggressive incidents recorded are presented in Table 8.1. The full results from the clinical audit are presented in Appendix L.

Table 8.1: Clinical Audit of Incident Reports

Resident	Gender	Nature of incident	Location	Injury	Action
E	F	Scratch, bite and kick PCA. Witness stated took instant dislike to PCA following 2 evenings of fluctuating mood, crying, calling out, singing and calm moments	Dining room	Carer received 2 nail indentations L. forearm, kick to stomach	Carer changed E moved to low stimulus environment
G	F	During ADL very aggressive, grabbing, pinching, hitting. Grabbed PCA by arm	Bedroom	Broken skin with nails, bruising to PCA	Staff left room, and returned later to finish when resident settled
		Agitated, resistive to care. Attempted to scratch staff	Bedroom	3cm skin tear on back L hand	Not documented
F	F	F hit female resident x2 on face and x2 on abdomen. Resident kicked F.	Corridor	Nil	Residents separated and talked to

8.6 Summary

In Chapter 8 data from the participant observation, group discussions, interviews and clinical audit are presented. These data collection methods were undertaken within an ethnographic approach and the data written in the first person.

My experience as a participant observer was described, with excerpts from my journal, describing the environment of the wing in which I worked, together with three examples of encounters with residents that demonstrate some of the tensions between staff actions and adherence to the policies of risk management, low stimulus, and minimal use of pharmacological restraints. The Registered Nurses spoke of the benefits of having a dementia diagnosis, as this information was useful for planning care.

During interview the DON raised issues around the lack of skilled staff and access to resources provided by the DSU, and difficulties in implementing planned activities when the residents may become overstimulated. The NUM identified that staff found it difficult adhering to the low stimulus environment. She also highlighted that physically aggressive behaviours were often mismanaged by the Personal Care Assistants.

The clinical audit of incident reports filed in Facility X identified four reports that referred to physically aggressive behaviours manifest by the resident participants.

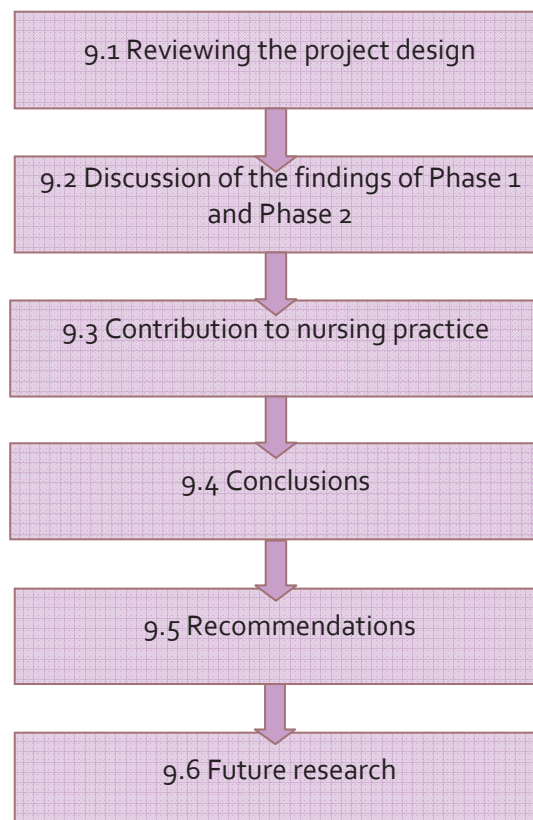
The following chapter, Chapter 9, will integrate the results presented in Chapters 6, 7 and 8. The chapter will refer to the literature and the research questions in addressing the purpose of the study. The conceptual framework developed from the literature will be reshaped in response to the integrated findings from this study.

Chapter 9

Discussion

The previous two chapters presented the findings from Phase 2. This chapter will draw together the results from both Phase 1 and Phase 2, with reference to the literature and the research questions, to respond to the purpose of this study. The conceptual framework developed during the Literature Review is discussed in terms of the findings. Finally, contributions to nursing practice and recommendations for future research are presented. The chapter structure is presented in Figure 9.1.

Figure 9.1: Structure of Chapter 9



9.1 Reviewing the Project Design

Based on the Literature Review presented in Chapters 2, 3 and 4, a conceptual framework was developed (see Figure 4.3). Based on the research questions and conceptual framework, a two-phase explanatory mixed methods design was utilised as it was deemed the most appropriate. As the data from Phase 1 were analysed, it became apparent that the key factors pertinent to this study had been correctly identified, and that there was strong relationships between the factors of dementia, BoC and residential aged care. To examine these relationships, and to examine in more detail the findings from Phase 1, an ethnographic approach was undertaken in Phase 2. This approach provided rich descriptive data that contributed to the understanding of how and why physically aggressive behaviours were of concern to nursing and care staff in the residential aged care sector.

9.2 Discussion of the Findings

The key findings from the research are best examined by referring back to the purpose and questions underpinning the study. The overall purpose of this thesis was to answer the question: ‘To what extent are physically aggressive behaviour exhibited by residents with dementia of concern to nursing and care staff in the Tasmanian residential aged care sector?’

Based on this broad overall purpose and the conceptual framework developed in Chapters 2, 3 and 4, the key questions for the research were identified as follows and findings for each are discussed in turn.

1. (a) What are staff perceptions of the frequency of BoC exhibited by residents with dementia in Tasmanian RACFs?

- (b) How would nursing staff rank the BoC causing most disruption to the everyday running of facilities?
 - (c) How would nursing staff rank the BoC causing them most personal distress?
2. What is the incidence of physically aggressive behaviours among residents who have dementia living in a Tasmanian RACF?
 3. What are the reporting practices of nurses and care staff in relation to physically aggressive behaviours?
 4. How are physically aggressive behaviours by residents with dementia understood by Registered Nurses, Enrolled Nurses and Personal Care Assistants employed within a Tasmanian aged care facility?
 5. How do these understandings affect the strategies utilised by staff to manage residents' physically aggressive behaviours?

9.2.1 The Perceptions of Frequency and Impact of BoC

The perceptions of frequency and impact of BoC were explored during Phase 1 with data collected in fifteen Tasmanian RACFs. Residents' repetitive actions or questions, wandering or intrusiveness, and verbal disruption in that order were reported by staff as the most frequently occurring BoC. Verbal disruption, wandering or intrusiveness and repetitive actions or questions were perceived to be the three most disruptive BoC to the running of the facilities, whereas physical aggression followed by verbal disruption, and wandering or intrusiveness were ranked 1, 2, and 3 respectively by respondents as the BoC causing them most personal distress.

These results concur with earlier studies that found verbal disruption is a frequently occurring event in residential aged care facilities (Cohen-Mansfield,

Werner et al. 1990), aggressive behaviour contributes to increases in nurse stress (Rodney 2000), and that sexually inappropriate behaviours in persons with dementia occur infrequently when compared to the other BoC (Harris and Wier 1998).

Care staff who spend greater amounts of time working in dementia SCU, compared to those who work in residential care facilities without SCU, have been shown to experience less distress from disruptive behaviours (Morgan, Stewart, D'Arcy, Forbes and Lawson 2005). This is consistent with findings from an American study (Zimmerman, Williams et al. 2005) that used interviews with 154 direct care providers working in 31 residential care/assisted living facilities and ten nursing homes to explore dementia related staff stress. This study reported that stress was more often reported by staff who had only been employed for one to two years compared to those staff who had been working in a facility for a longer period. These findings are contested by an Australian study in which it was reported that staff with greater experience in nursing homes experienced more strain (Brodaty, Draper and Low 2003b).

A lower distress level may be related to perceptions of incidence. Respondents in this study reported a lower incidence of physical aggression if they had worked in their current facility for more than five years, suggesting that perhaps staff may be more experienced, know the residents more intimately, have a different understanding of what constitutes aggressive behaviour, have developed management strategies or coping mechanisms for reducing their distress, or are desensitised or enculturated into accepting or tolerating aggression as part of their everyday work.

This is further supported by the comments made by three Personal Care Assistants (two of the three had worked in the aged care for more than ten years, and the third one to five years) suggesting they tolerate residents' behaviours as they are part of the job. These comments are consistent with previous literature in which it is suggested that Personal Care Assistants often find themselves in a setting that expects, tolerates and sometimes accepts violence against caregivers as part of the job, and moreover, in time, many of the carers also begin to accept violence as part of their jobs (Gates, Fitzwater et al. 1999:19). As one Enrolled Nurse reported in Chapter 6, she was not offended by resident behaviour as she knew it was part of the resident's medical condition.

Nearly 30 per cent of staff in this study reported physical aggression occurring more than once/day. This is an important finding because resident resistiveness and aggression are reported to be the cause of care staff injury for 32.8 per cent of compensable claims and 39.3 per cent of unreported injuries (Greal 2005).

There was a tension between the quantitative and qualitative data obtained from the BoC survey. On the one hand, participants reported physical aggression as the most personally distressing behaviour, followed by verbal disruption and wandering. Yet, in their comments, some participants espoused an empathetic approach suggesting they accept and tolerate the BoC. Either they are demonstrating a significant knowledge base and an appreciation of the dementing process, at a pathological level, allowing them to understand that residents who exhibit physically aggressive behaviour do so unintentionally and without malice; or they are objectifying the behaviours, and this together with their familiarity of the residents stops them looking for a tangible reason or trigger for aggressive

behaviour, such as pain, urinary tract infection, cold, wet, thirsty or lonely. The latter, if correct, raises doubts about the nurses' and care staffs' educational preparation highlighting their inability to recognise the complex care needs of older people, particularly those with dementia (see Section 4.3).

In discussing Phase 1 of the study with DONs, the researcher discovered that while the intent was to obtain data from direct care staff, there were other employees who are regularly involved in the daily care of residents with dementia, and who should have been included in this project. People such as diversional therapists, cleaners, kitchen staff, together with administrative staff who are typically located at the main entrance of facilities, and whose contribution to ensure that residents do not inadvertently leave the premises are perhaps not sufficiently acknowledged.

The findings from Phase 1 suggested that physically aggressive behaviour occurred infrequently, but that it had high impact on nursing and care staff. This finding raises doubt as to the veracity of some previous studies that reported a high incidence of physically aggressive behaviour. The strength of the mixed methods approach used in this study provides the flexibility to confirm the integrity of the results obtained in Phase 1 further by utilising different data collection methods in Phase 2.

In Phase 2, eight resident participants from one RACF were observed using a modified form of the ABMI. This method of structured observation identified that the most frequently observed resident behaviours were babbling and aimless wandering. No physically aggressive behaviours were manifest during the structured observation periods.

The association between staff presence and occurrence of behaviours was statistically significant with all behaviours decreasing when a staff member was present in the room with the resident. In this instance, the presence of staff refers to a staff member being in the room with the resident and not actually performing hands on care.

The association between resident activity and manifestation of BoC was also statistically significant. Most of the observed screaming occurred while the resident was not engaged in any activity. Most of the walking was considered aimless, i.e. with no recognisable purpose. These results concur with associations between inactivity and increased disruptive behaviour and between being alone and screaming previously reported in the literature (Cohen-Mansfield, Werner et al. 1990; Souder, Heithoff et al. 1999b).

The residents in Facility X spent a substantial proportion of their time alone and/or not engaging in any activity. This finding was surprising given that modifying the psychosocial and physical environment of the person with dementia is identified as a key factor in the management of BoC (see Section 3.3.2). Although the methodological rigour of some of the studies investigating such approaches is questionable (Gitlin, Liebman et al. 2003), involvement in activities such as music, exercise, massage, aromatherapy and the implementation of environmental manipulation such as SnozelenTM and the Eden Alternative are nevertheless suggested to affect resident mood and behaviour (Bryant 1991; Barker and Pinkey 1994; Brawley 2002; van Diepen, Baillon et al. 2002).

9.2.2 The Frequency of Physically Aggressive Behaviour in Facility X

The Facility X survey was distributed to nursing and care staff working in Facility X. Almost half (40 per cent) the staff completing the Facility X survey were aged

in the 51 to 60 years category, which is similar to the national picture in which the average age of Australian nurses working in aged care is 47 years (Illiffe 2003). To facilitate comparison of the data, the 20 behaviours listed on the Facility X survey were collapsed into three categories: aggressive behaviour; physically non-aggressive behaviour; and verbally agitated behaviour (see Sections 5.8.2 and 6.3.2). Although the low response rate to the survey (25 per cent) precluded any comparative analysis, consistent with the findings from Phase 1 BoC survey, the majority of staff (80-96 per cent) reported that aggressive behaviours had not occurred during their last working week. This does not suggest that aggressive behaviour does not occur in the study facility, but rather it occurs at very low levels. Verbally agitated behaviours were perceived by staff to occur more frequently than aggressive behaviours. This finding is also consistent with the finding from the BoC survey (see Section 6.2). This suggests that the finding of low frequency of physically aggressive behaviour in this study is highly likely to be a true and accurate representation of the group studied.

Differences in the demographic profile of the respondents and non-respondents are not known. Although concerns can be raised as to potential bias of the sample, the findings from the Facility X survey are consistent with those from the BoC survey, which gives confidence in the result.

9.2.3 The Reporting of Physically Aggressive Behaviour

The Facility X survey identified that the imperative for reporting incidents of aggressive behaviour was different for the Registered Nurses and the Personal Care Assistants. The Registered Nurses were driven by documentation requirements and OH&S imperatives, while the Personal Care Assistants reported incidents of aggressive behaviour when a colleague was injured. This is important

because the under-reporting of resident physical aggression has been identified (Gates, Fitzwater et al. 1999; Wilkinson 1999; Gates, Fitzwater et al. 2003; Grealy 2005), and is a reflection of the culture of the aged care sector, which tolerates a level of resident aggression as ‘part of the job’ unless someone is injured. Even then, this study revealed that Personal Care Assistants are unlikely to report incidences of physical aggression because they blame themselves for its occurrence (see Section 8.4.2).

A clinical audit of nursing notes and incident reports was conducted in Phase 2 of this study. The audit revealed the reporting of a small number of physically aggressive incidents involving the resident participants. This seemed to be consistent with the low frequency of physical aggression reported in the BoC survey, the Facility X survey and the participant observation. While the under-reporting of aggressive incidents in health care settings has been identified (Gates, Fitzwater et al. 1999);(Lion, Snyder et al. 1981; Rosenthal, Edwards et al. 1992; Sommargren 1994), these results suggest that the reporting practices of nurses in Facility X are indeed representative of the incidence of physically aggressive behaviour.

The role of the Registered Nurses in the facility in this study was predominantly medication administration, resident assessments and documentation. For the most part, they delivered little hands on care, and consequently were less likely to be in physical contact with residents who were aggressive. However, their role also included a responsibility for staff and resident safety. Therefore, their imperative for reporting physically aggressive incidents was driven by OH&S requirements to ensure both staff and resident safety and to comply with industry regulations. In this study, the Registered

Nurses only reported resident physical aggression during the admission process, and thereafter only if the behaviour was uncharacteristic of that resident or had resulted in injury to staff or another resident.

In contrast, the Personal Care Assistants who deliver the majority of hands on care to the residents (Hogan 2004), and thus were more exposed to physical contact with the residents, were more inclined to report residents' aggressive behaviours when they or their colleagues experienced a 'near miss' or sustained an injury in an attempt to ensure their own personal safety. However, both the Registered Nurses and Personal Care Assistants documented behaviours during a resident's initial admission period in accordance with RCS requirements.

9.2.4 Understandings of Physically Aggressive Behaviour in Dementia

Given the subjective nature of aggression, it was important to explore in more detail why low frequency physically aggressive behaviours had such a high impact on nursing and care staff. This necessitated examining nursing and care staffs' understanding and knowledge of dementia and physical aggression.

Data were collected using participant observation, group discussions and interviews. Findings revealed different attitudes toward aggression and identified that multiple understandings of dementia exist among Registered Nurses and Personal Care Assistants, and that these varied understandings contributed to their different perceptions of frequency, impact and management of physically aggressive behaviour.

In the context of their work, it was evident that the Registered Nurses participating in Phase 2 had an extensive knowledge of dementia. Best practice in dementia care (RNAO 2004) recommends that nurses providing care for people with dementia should have a clear knowledge and understanding of the types of

dementia. The DON, NUM and Registered Nurses in this study clearly demonstrated their knowledge of dementia symptomatology and behaviours by planning care and management strategies according to an informal diagnosis of dementia. In contrast, the Personal Care Assistants interpreted behaviours associated with dementia from a social and emotional perspective in which they constructed residents' physically aggressive behaviour as uninstinctual (Fromm 1973) and as unacceptable social behaviours that transgressed the bounds of civility (Billante 2002; Billante and Saunders 2002; Billante and Saunders 2003).

As recounted in Chapter 8, the DON described some of the residents as 'aggressives'. It was not only the DON using this language. During my visits to the facility, Personal Care Assistants would find me and show me residents who were aggressive. In circumstances where resident behaviour was considered uninstinctual and uncivilised, the label of 'aggressive' was attached to the resident. This process of labelling residents based on a sometimes small deviation from the behaviour expected of a 'good patient' (Lawler 1991:147; Fassett and Gallagher 1998:51) resulted in the resident losing 'their identity as an individual, [with] their selfhood becoming lost in the language of a descriptive category' (Sondermeyer 2002:9) and the label becoming their defining characteristic. Once labelled as aggressive, a resident was forever more defined by that label and treated accordingly. The perpetuation of the label, even after the behaviour had ceased, was a contributing factor to the perceived frequency of physical aggression.

Apart from labelling residents as aggressive, the Personal Care Assistants' misinterpretation of physically aggressive behaviour was identified as a leading cause of self-blame, i.e. if a resident's behaviour was aggressive the Personal

Care Assistants blamed themselves for causing the behaviour. Lanza (1992:165) writes that blame is a 'particularly important concept when addressing the issue of patient assault'. She argues that victims often blame themselves and/or those in authority, and that co-workers, albeit unwittingly, blame the assaultee, and that according to Ryan (1976) those in authority or the 'system' as a whole often engage in a process of blaming the victim. The process of self-blame in this facility may be due in part to a culture of not 'rocking the boat'. This may have been perpetuated in Facility X where staff were actively discouraged to complete official incident reports following episodes of aggressive resident behaviours.

This misunderstanding of physically aggressive behaviour associated with dementia is arguably a direct reflection of the limited training required for Personal Care Assistants in the aged care sector. While Hogan (2004) recommended that the Government should expand its support for education and training in the sector, the fact remains that only 22 per cent of Personal Care Assistants currently employed in the sector hold a Certificate III or above (Healy and Richardson 2003) and that personal care workers may be appointed without any formal qualifications (Department of Education Employment and Workplace Relations 2008).

Implicit in the prevailing understandings of dementia identified in this study was a culture of tolerance of BoC. Tolerance to resident aggression is well recognised in the literature (Gates, Fitzwater et al. 1999). Data from the Facility X survey, group discussions and interviews all highlighted that tolerance of BoC was a contributing factor to the under-reporting of physically aggressive incidents. This study found that tolerance to BoC can be attributed to a number of factors including; length of time working in aged care (see Section 6.2.2);

understanding of BoC; and the relationship between the Registered Nurse/PCA and the resident (see Section 8.4.2).

Tolerance of both Registered Nurse and Personal Care Assistant to physically aggressive behaviour was identified even though their understandings of dementia and aggression were different. Physically aggressive behaviours in this study were tolerated by Registered Nurses because they considered the behaviour to be a symptom of the illness. Physically aggressive behaviours were tolerated by the Personal Care Assistants as they considered these behaviours to be ‘part of the job’ or manifest as a negative response (instinctual aggression) to their presence during caregiving, for example showering.

Tolerance of aggression was also reflected in the clinical audit of nursing notes and incident reports in Facility X, which explored the reporting practices of care staff. A small amount of under-reporting could be attributed to a facility policy of not continually reporting a behaviour once identified, a cultural imperative of not wanting to ‘rock the boat’, and a perception among some of the care staff that management ‘didn’t care’. However, it is reasonable that under-reporting of physical aggression was also reflective of the tolerance of behaviours by many of the nursing and care staff.

9.2.5 The Impact of Understanding on Management Strategies

The impact of nursing and care staffs’ understanding of dementia and physically aggressive behaviour was demonstrated by the variable adherence of two important behaviour management strategies. The first strategy related to risk management and the second to creating a low stimulus environment.

The risk management approach in respect to resident wandering appeared to be effective in reducing agitation in that residents were not restrained or

discouraged from wandering. This was a reasonable strategy given reducing agitation is recognised as one method of preventing physically aggressive behaviour (Hall, Kirschling et al. 1986; Hall and Buckwater 1987; Cleary, Clamon et al. 1988; Cohen-Mansfield, Marx et al. 1989). The staff response to resident wandering reflected concerns about resident safety.

However, while the DON espoused that she was ‘into risk’, and allowed residents to wander freely, there were a number of examples that contradicted this. For example, during periods of structured observation (see Section 7.2) undertaken for this study, residents A, E and G were routinely observed to be in bed, with bed rails raised or sitting in geriatric chairs with table tops so they could not get out of the chair. Both these practices constitute physical restraint (Koch 2004:244), which also contradicts the facility’s risk management policy.

Other contradictory behaviour management strategies included one resident being regularly refused a nightcap of sherry because she was considered by nursing staff to be at risk of falling. Another resident, Resident B, had his cigarette intake strictly controlled by the Personal Care Assistants because they considered him to be a chain smoker, and his supply of cigarettes were limited by his budget and damaging his health. These examples are suggestive of tensions in implementation of, and variable adherence to, the risk management approach. It would seem that not all nursing and care staff understood the rationale behind the approach.

Similarly, the low stimulus environment was met with substantial resistance from care staff who were concerned that a low stimulus environment deprived residents of meaningful activity. This may have been a valid concern given the shortage of qualified nurses capable of conducting regular resident

assessments. In the absence of daily assessments, residents were either over-stimulated by being involved in inappropriate activities resulting in the manifestation of BoC, while others were under-stimulated by being left alone, doing nothing, which also eventuated in the manifestation of BoC. Findings from this study revealed that one resident who spent the majority of her time alone screamed frequently while another continually exhibited attention seeking behaviour because he was not engaged in any activity. This raises concerns as to whether leaving residents alone may have been a behavioural management approach in itself in keeping with the policy of risk and low stimulus policy in Facility X. Being alone and not engaged in activity may form part of a low stimulus environment. This study did not extend to explore the effect of low stimulus environments on physically aggressive behaviour, or to engage in the ethical debate around neglect. However, the complete absence of stimulus may constitute neglect in some situations.

Findings from this study suggest that many of the staff were unaware that some residents were alone, doing nothing while others were inappropriately involved in over-stimulating activities. While this is a reflection of the education and training of the staff in terms of understanding the needs of people with dementia, it is also demonstrative of the ineffective communication between nursing and care staff. Ineffective communication within the aged care sector has been reported previously (Menzies 2002; Roff 2005).

The absence of effective communication between staff in this study was clearly demonstrated by the staffs' response to the resident H incident (discussed in Section 8.2.5). Attempts to manage the incident were disjointed and ineffective due to the lack of communication between staff. This incident also suggested the

facility lacked a policy or protocol to manage aggressive behaviour (although there were policies on the management of dementia *per se*) and enough suitably experienced and/or educated staff to manage physical aggression when it did occur. The absence of a policy or procedure to manage physically aggressive residents was a further indication that such incidents occurred infrequently.

While a low stimulus environment is acknowledged as an option for moderating agitated and aggressive behaviours (Hall and Buckwater 1987; Nelson 1995; Kovach 2002; Gitlin, Liebman et al. 2003), several issues emerged in relation to maintaining that environment in Facility X. These included: nursing and care staff resistance; providing care for a mixed population of residents; and a shortage of skilled nursing staff capable of assessing residents on a daily basis.

My observations supported the notion that the staff found the low stimulus conditions difficult to work in and to maintain. Even though during the handover times and unit meetings the staff were regularly encouraged to work quietly by the NUM, I often observed staff speaking to the residents and to each other in loud and raised voices. I heard them yelling to each other down the long corridors of the facility.

A low stimulus environment was also difficult to live in for some of the residents. The facility provided care for a mixed population of residents with a range of cognitive and physical abilities and, while most of the residents were informally diagnosed by the Registered Nurses as having dementia, some had been admitted for other reasons.

The differences in understanding of dementia and physically aggressive behaviour were also evident in the different approaches to pharmacological

management of physically aggressive behaviour. The DON and NUM clearly articulated that their preference was not to sedate residents. However, both acknowledged that this practice continued. The Personal Care Assistants revealed that they did not understand what the medications did. For the most part, they too did not want to have residents sedated, but where their safety was at risk they would request that the resident be sedated, particularly to allow hygiene care to be performed.

9.3 Contribution to Nursing Practice

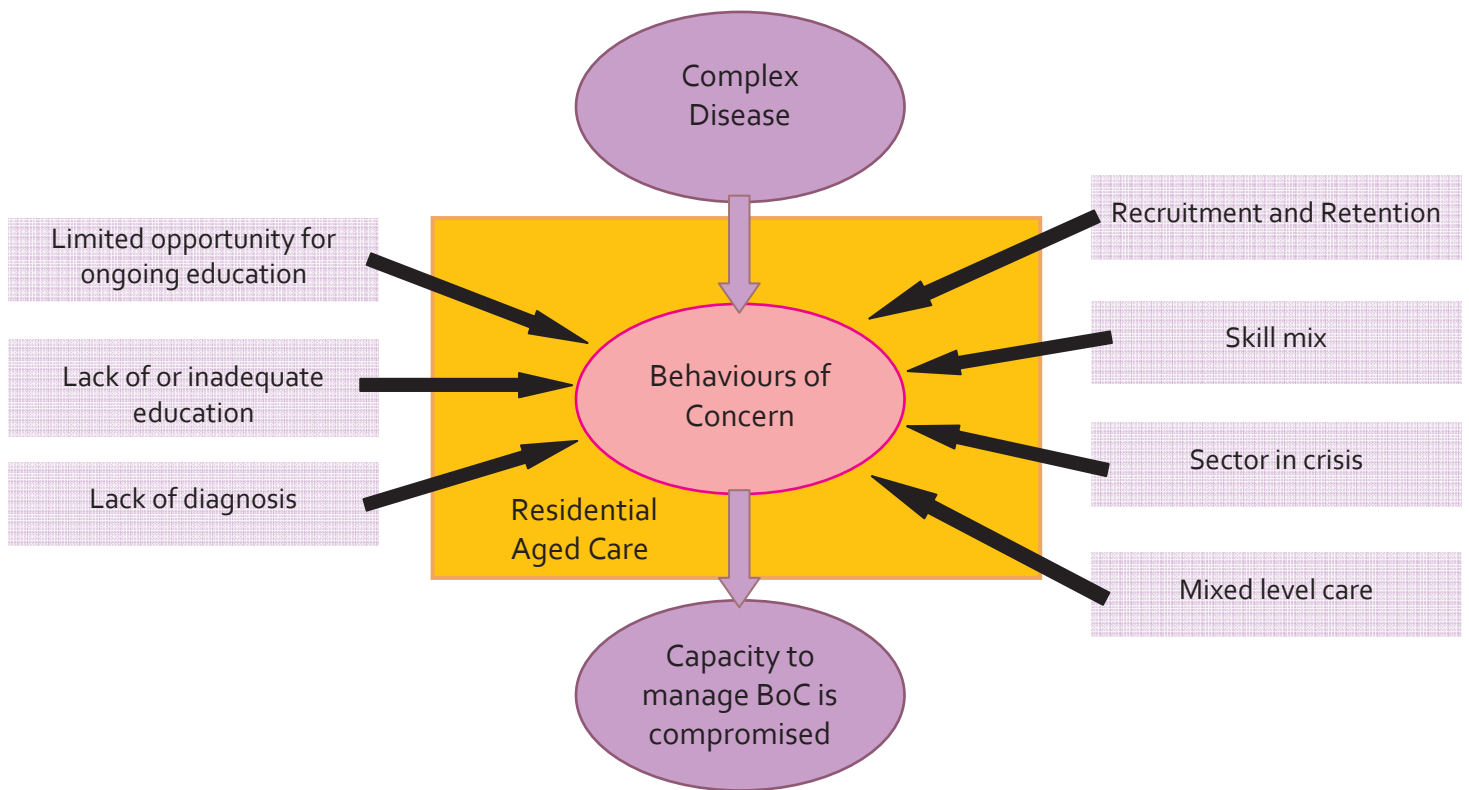
This mixed methods study explored the phenomenon of physically aggressive behaviour in people with dementia and provided some unique insights into how nursing and care staff working in the aged care sector understand and manage care for people with dementia. This is an important and timely area of nursing research because of the increasing numbers of Australians with dementia living in residential aged care, which by implication suggests an increasing number of people who may exhibit physically aggressive behaviours.

The extensive Literature Review presented in Chapters 2,3 and 4 outlined the three key factors contributing to how the manifestation of physically aggressive behaviour by residents with dementia might impact on nursing and care staff. The conceptual framework developed at the start of this study was a useful way to demonstrate how each of these were interrelated; however, it did not explicate that relationship. This study has added to nursing knowledge by clarifying some of these relationships.

The conceptual framework has been redeveloped following consideration of the research questions, and the answers that emerged from the data. Figure 9.2

represents the conceptual framework after redevelopment following consideration of the research questions, and the answers that emerged from the data..

Figure 9.2: Revised Conceptual Framework



This revised framework clearly depicts how the BoC are understood and managed from within the residential aged care context. Therefore, to understand whether physically aggressive behaviours are of concern to nursing and care staff, researchers need to firstly understand the key issues impacting on that context. This study has highlighted that the capacity of the aged care sector to manage physically aggressive behaviours is compromised by workforce and health economic issues.

The Australian residential aged care sector continues to face long-standing workforce issues related to de-professionalisation, recruitment and retention, and

lack of wage parity with the acute care sector (Cecchin and Jarrad 2002; Pearson, Nay et al. 2002; Hogan 2004; Richardson and Martin 2004). The result of these workforce issues is a shift toward an increasingly high proportion of unregulated, non-nursing care staff. This is a recognised concern because the care of people with dementia is now largely being provided by staff who have little training (Richardson and Martin 2004) or understanding of the care needs of people with dementia (Royal College of Nursing Australia 2004). This study adds to the debate around the appropriateness of unregulated workers taking on the care of people with dementia, and questions the ability of untrained staff to manage physically aggressive behaviours.

9.4 Conclusions

Findings from this study supports Hogan's (2004) recommendation, arguing that the content of training curricula should be reviewed and modified to more adequately reflect the needs and reality of work in the sector. Moreover, findings of this study supports the peak nursing body recommendation that Personal Care Assistants should have at least a Certificate III in aged care (Royal College of Nursing Australia and the Australian Nursing Federation 2004). Further, the role of the Registered Nurse in residential aged care should be redefined in a way that harnesses their vast experience and knowledge base through recognition of aged care as a nursing specialty.

This study has identified that while only one incident of physically aggressive behaviour did occur, it did suggest that the capacity of the sector to manage physically aggressive behaviour in people with dementia was compromised. This compromised capacity can be attributed to a number of key

issues, such as: multiple understandings of dementia and aggression; limited education and training of Personal Care Assistants; limited opportunity for ongoing education for Registered Nurses; a culture of tolerance to physical aggression; ineffective communication between nursing and care staff; and a lack of collaboration between staff to manage and prevent episodes of physically aggressive behaviour.

The aged care sector is vulnerable to changing conditions, particularly relating to staffing and workloads that ‘undermine the capacity of the sector’ (Robinson, Andrews-Hall and Fassett 2007:368). Moreover, it has been identified that the aged care sector has ‘limited reserves to manage the implications of adverse events’ (Robinson, Andrews-Hall and Fassett 2007:368). The manifestation of physically aggressive behaviours can be considered ‘adverse events’. This study confirms that the ‘limited reserves to manage’ adverse events are insufficient to manage physically aggressive behaviour and thus these behaviours have a high impact on nursing and care staff.

9.5 Recommendations

Although Richardson and Martin (2004) stated that the aged care workforce does not appear to be in crisis or even under serious stress, this thesis argues otherwise. Both the findings of the present study and those of Robinson et al. (2002, 2007) are key indicators of a sector in crisis in terms of limited capacity to manage physically aggressive behaviour in people with dementia and to redress recruitment and retention issues by providing positive clinical experiences for undergraduate nursing students.

Building capacity within the aged care sector to manage the physically aggressive behaviours of people with dementia effectively is imperative. One way this can be achieved is by preventing the further de-professionalisation of the aged care workforce by up-skilling and retaining the current nursing staff. Strategically, increasing education and training opportunities for staff will be of benefit because of the increasing acuity of residents (Gibson et al. 2002; Andrews-Hall, Howe and Robinson 2007). This study has identified another way in which the aged care sector can build capacity, that is, to rethink the way care is provided to people with dementia.

The need to rethink the provision of care to people with dementia is important because findings from this study indicate that the general view upheld in the literature that physical aggression in residential aged care is frequent is not accurate. This study has shown that not only is this general view most likely to be inaccurate, but the development and provision of care to the people with dementia based on this foundation principle may be misguided. The provision care for people with dementia needs careful reconsideration.

The provision of care to people with dementia needs to be delivered by educated, experienced professional nurses, because care planning and implementation should be based upon an accurate diagnosis, a true understanding of the pathology involved, and knowledge of subsequent symptom manifestation. The implementation of low stimulus or modified risk management strategies should be undertaken on an individual needs basis so as not to have a negative effect on those residents who are less cognitively impaired. For example, some residents will be more affected by activity and stimulation.

However, the ramifications of rethinking the way to care for a person with dementia is provided will extend beyond the care recipient. Modifications to the current approaches to care delivery should include: ensuring all residents with dementia have an accurate diagnosis; skilled nursing staff assessing; implementing and re-evaluating the effectiveness of care plans; regular and frequent assessments of residents by experienced Registered Nurses to determine the appropriateness of activities, for example attendance at music concerts; ongoing education; and staff development programs that must include the multidisciplinary team as well as support staff such as cleaners, catering and administrative personnel who inevitably have contact with the residents to ensure all staff understand the rationale behind BoC management strategies and promote adherence to the implementation of these strategies; and provision and allocation of appropriate rooms for residents who exhibit BoC to avoid unnecessary interaction and over-stimulation by other residents.

Therefore, the recommendations for change identified by this study are:

1. All residents in care with suspected dementia undergo the diagnostic procedure to identify type and stage of dementia.
2. Undergraduate nursing education should include a core component that addresses:
 - a. pathophysiology, pathology and pharmacological treatment of the dementias; and
 - b. pharmacological and non-pharmacological management of BoC, especially the management of physically aggressive behaviours.

3. Undergraduate nursing education to include a compulsory clinical practicum in a residential aged care facility that is recognised as providing excellent clinical placements (Robinson, Venter et al. 2005).
4. Education and training of Enrolled Nurses (Division 2) and Personal Care Assistants be expanded to include a core component that addresses (albeit not to the same level of understanding as the Registered Nurse):
 - a. pathophysiology, pathology and pharmacological treatment of the dementias; and
 - b. pharmacological and non-pharmacological management of BoC, especially the management of physically aggressive behaviours.
5. Education and training of Personal Care Assistants be a minimum of Certificate IV, and that this training be expanded to include a non-elective core component on dementia care and behaviour management.
6. Employment of Nurse Practitioners in the residential aged care sector to facilitate diagnostic process and to monitor (in conjunction with community-based pharmacists) the pharmacological management of residents with dementia
7. RACFs to have increased access to support services such as Dementia Behaviour Management Advisory Service and that this support should be ongoing for the duration of the admission; and to encompass changing behavioural patterns.
8. Provision of a frequent and regular facilitated group debriefing session for nursing and care staff who provide care to people with dementia who exhibit physically aggressive behaviour.

9. Removing wage disparity between acute care and aged care in the nursing profession. This must include providing a professional working environment that recognises an equivalent skill base and award commensurate with qualifications and experience.
10. Increasing funded specialist registered nursing positions in aged care.

9.6 Future Research

Further studies should be undertaken to explore whether the findings from the present study are particular to Facility X and to Tasmanian RACFs, or are transferable to other residential aged care settings. In addition, a more systematic approach should be undertaken to investigate which of the management strategies used in Facility X were effective in preventing physically aggressive behaviours. For example, the risk management approach appeared to be an effective approach to the prevention of physical aggression, but its implementation raised a number of moral and ethical questions in relation to Duty of Care to both the resident and care staff.

In response to the potential Hawthorn effect caused by my presence in the setting, future research might benefit from being conducted with intermittent observation or completely without observation.

Appendices

Appendix A: BoC Survey

Appendix B: Facility X Survey

Appendix C: Cohen-Mansfield Agitation Inventory

Appendix D: Agitated Behaviour Mapping Instrument

Appendix E: Permission Letter to use the ABMI

Appendix F: Modified Version of the ABMI

Appendix G: Letter to General Practitioners

Appendix H: Minimal Risk Ethics Application

Appendix I: Social Science Ethics Application

Appendix J: Description of the DODO incident

Appendix K: Publications Arising from this Study

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